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REPORT NO. 1190 JANUARY 1963

NEUTRON REFLECTION AND FLUX VERSUS DEFTH FOR NEVADA TEST SITE SOIL

Frank J. Allen Arnold Futterer William Wright



RDT & E Project No. 1A022601A086

BALLISTIC RESEARCH LABORATORIES

ABERDEEN PROVING GROUND, MARYLAND

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Terminal Ballistics Laboratory

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FOREWORD

This is the second of a series of reports, each one of which presents calculated results for neutron reflection and flux versus depth for a single material. The first report, ERL Report No. 1189, gives the results for concrete. The present report contains the results for Nevada Test Site soil dry, 50% saturated, and 110% saturated. Other materials which will be treated in the series of reports include iron and water. For each material eight incident energies: 0.1, 0.25, 0.5, 1.0, 2.0, 3.0, 5.0 and 14.0 MEV and four incident angles for each energy: 0, 30, 45 and 70° are considered.

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FJAllen/AFutterer/Wright/jdk Aberdeen Proving Ground, Md. January 1963

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ABSTRACT

Detailed calculated results on neutron reflection and flux versus depth for Nevada Test Site soil are given in the form of machine printouts. The angular and energy distributions of the reflected neutrons along with the energy-dependent and total flux at various depths are contained in tabular form on the printouts. Neutron number current, number flux and dose transmission as functions of thickness are also given in tabular form on the printouts.

Tables of summary information on reflection are presented. These contain number current, number flux, dose and energy reflection factors as functions of incident energy and angle.

A few figures are presented to illustrate graphically the meaning of the various tabular results.

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INTRODUCTION

A systematic study of neutron transport in common materials is in progress at the Ballistic Research Laboratories. Primary emphasis has been placed upon the dose transmitted through various thicknesses of these materials when monoenergetic neutrons strike a laterally infinite slab, not necessarily homogeneous, at a fixed angle of incidence. The principal results are given in Reference 1.

The Monte Carlo machine program which calculates these results also calculates number current, number flux, dose, and energy reflection and transmission; reflected and transmitted angular and energy distributions; and energy-dependent and total flux versus depth. Only a small fraction of this information has been reported previously in conjunction with the dose transmission results. A series of reports presenting this information is in preparation. The first report of the series, Reference 4, presents the results for concrete. The present report, the second in the series, gives similar results for soil. The soil chosen is Nevada Test Site soil (Area 7). The calculated results pertain to three conditions of the soil: dry (natural); 50% saturated; and 100% saturated. The reason for tabular presentation of the detailed results is simply that a much larger number of pages would be required to display equivalent information graphically. The gross results for reflection given in Tables 1A, 1B and 1C are discussed in the following section.

SUMMARY DATA ON REFLECTION

Tables 1A, 1B and 1C give the number current, number flux, energy and dose reflection factors (albedos) for eight incident energies (E_0) and four incident angles (θ_0) . "Flux" and "factor" are defined in the next section. The slab thickness for which the entries in Tables 1A and 1B are calculated is 24 inches, except for incident energies of 5.0 and 14.0 MeV. For the latter two the thickness is 36 inches. The slab thickness for all entries in Table 1C is 24 inches. These thicknesses are sufficiently great so that the results differ imperceptibly from the corresponding results for slabs of infinite thickness.

The composition assumed for Nevada Test Site soil is based on that given in Reference 2. The atoms of all elements other than hydrogen, oxygen, aluminum, and silicon were replaced by silicon atoms. Table 7 gives the elemental composition assumed in the machine calculations. Moderate changes in the soil composition - except for the hydrogen content - would not alter greatly the results given.

The neutron cut-off energy of 10 electron volts was used for all of the calculations. Below this energy eneutron trajectories were no longer followed in the machine program.

DESCRIPTION OF MACHINE PRINTOUTS

Two distinct types of machine printout are included in this report. For each incident neutron energy and angle, there are two printouts and these are placed side by side. We now describe the meaning of the information on the two types of printout, denoting them by Type 1 and Type 2. Although the actual printout sheets are not so labelled, no difficulty will be experienced in distinguishing between the two.

A. Description of Type 1 Printout

The problem calculated is defined by the fifth line of the machine printout, which gives the slab configuration, and the first two numbers of the
fourth line, which give the neutron's incident energy (in MEV) and the cosine
of the angle between the incident direction and the slab normal. The third
number in the fourth line is the energy cutoff, that energy (in MEV) below
which neutron trajectories are no longer traced in the Monte Carlo program.
On the second line of the machine printout, the first two numbers are the
run number, used for indexing purposes, and the number of neutron histories
used in the Monte Carlo program. The fifth number in the second line is the
number of mean free paths the incident neutron would have to traverse to emerge
from the rear face of the slab without having suffered an interaction.

The third and fourth numbers on the second line designate the set of energy intervals and angular intervals, respectively, which are used in the calculation. A transmitted or reflected neutron emerges from the slab with a definite energy and direction; this precise information would be very

difficult to utilize. Therefore, a set of energy and angular intervals are utilized and the emergent neutron is placed in the appropriate interval. Several energy "sets" have been used. The energy intervals, of which the various sets are composed, are shown in Table 2. The sets are designed to make full use of the ten energy intervals available in the machine program for all source energies. Thus the intervals used must vary with the source energy. The scheme devised was that of refining the remaining upper energy intervals when decrease of the source energy makes the highest energy interval in a given set devoid of neutrons. This method provides the most detailed spectral information at the highest available emergent neutron energies, that is, in the most important part of the spectrum. At the same time, the lower energy intervals are constant from set to set (the sets are ordered: 2, 2A,... 2E), thus allowing intercomparison as the source energy is changed.

Tables 4 and 5 and the diagram accompanying Table 5 show the angular intervals which have been used. θ_1 , θ_2 , ϕ_1 , and ϕ_2 are the end points of the angular intervals shown in these tables. The θ -2541 histogram has been used for normally incident neutrons, the $\theta\phi$ histogram for slant incident neutrons*.

The seventh and eighth lines of the ORDVAC printout give the position in centimeters of internal interfaces which subdivide the slab into eight regions. They are used by the Monte Carlo transport code to provide a spatial breakdown of certain events which take place within the slab.

The remaining entries on the Type 1 machine printouts are explained with the aid of the following notation.

For some of the deep penetration calculations which employed a splitting technique in the basic Monte Carlo machine program, the 9 - 2541 histogram was used even with slant incident neutrons. This is because primary emphasis has been placed upon transmission results. For deep penetrations the transmitted neutrons, with the exception of those remaining near the source energy after scattering from a light nucleus, have "forgotten", i.e., have little correlation with the incident direction. In these cases the distribution of transmitted neutrons is almost independent of the azimuthal angle.

Let $T_{i,j}$ = fraction of neutrons transmitted into the $i\frac{th}{t}$ energy group and $j\frac{th}{t}$ angular sector.

 R_{ij} = fraction of neutrons reflected into the ith energy group and jth angular sector.

D_i = flux to dose conversion factor for ith energy group (see Table 2).

 $D_{_{\rm I\! I\! I}}$ = flux to dose conversion factor for source energy (see Table 3).

 Ω_4 = number of steradians in $\frac{1}{2}$ angular sector (see Tables 4 and 5).

9 = angle of incident neutrons with respect to slab normal.

Sec θ_j = mean value of secant for neutrons in the $j\frac{th}{t}$ angular sector; actually the secant of the mean angle is used.

Subscripts i and j refer to the ith energy group and jth angular sector, respectively.

The flux-to-dose conversion factors in Tables 2 and 3 are based on Reference 3.

Then, F = incident flux per neutron = Sec 0.

 $D = incident dose per neutron = D_m Sec 0.$

The quantities in the table "Number of Scattered Neutrons vs. Energy" are then given by:

(Number Transmission Factor)_i =
$$\sum_{j=1}^{12} T_{ij}$$
 i = 1, 2,....10

(Number Flux Transmission Factor)
$$= \frac{1}{F} \sum_{j=1}^{12} T_{ij} \overline{Sec \Theta_j}$$
 $i = 1, 2, 10$

(Dose Transmission Factor)₁ =
$$\frac{D_1}{D}$$
 $\sum_{j=1}^{12} T_{1j}$ $\overline{Sec \theta_j}$ $i = 1, 2,10$

The corresponding quantities for the reflected neutrons are obtained by replacing $T_{1,1}$ by $R_{1,1}$.

The quantities in the table "Number of Scattered Neutrons vs. Angle" are given by:

(Number Transmission Factor)
$$j = \sum_{i=1}^{10} T_{ij}$$
 $j = 1, 2, 12$

(Number Transmission Factor/Steradian)
$$j = \frac{1}{\Omega_j} \sum_{i=1}^{10} T_{ij}$$
 $j = 1, 2, 12$

(Dose Transmission Factor/Steradian)
$$j = \frac{\overline{Sec \, \Theta_j}}{\overline{D \, \Omega_j}} \sum_{i=1}^{10} T_{ij} \, D_i \quad j = 1, 2, \dots 12$$

The corresponding quantities for the reflected neutrons are again obtained by replacing $T_{i,j}$ by $R_{i,j}$.

The quantities listed on the lines following the table "Number of Scattered Neutrons vs. Angle" are all defined when the word "Factor" is defined. Wherever the word "Factor" is used, the operation of dividing the quantity in question by the corresponding incident quantity is implied.

The final two quantities listed are not fractions, but are the mean energy of the scattered transmitted neutrons and of the reflected neutrons.

Table 6 is a list of abbreviations used on both the Type 1 and Type 2 machine printouts. It is believed that the abbreviations used will quickly become clear so that constant reference to the list will not be necessary.

The Type 1 printouts in the present report contain little or no information on transmission. This is because the slab is thick and, except for a few machine runs, no statistical efficiency improving technique was utilized in the calculations. The main machine printout contains detailed information on transmission for various depths within the slab. The Type 2 printout contains the most important part of this information.

B. Description of Type 2 Printout

The entries in the top three lines are identical to some of the entries previously defined for the Type 1 printout; they serve to identify the problem.

Fluxes and doses are defined as before. Note, however, that the word "factor" is not used on the Type 2 printout. All entries on this printout are given on a per incident neutron basis. That is, the phrase "per neutron" (or the abbreviation "per NT") on this printout means "per incident neutron."

The first two tables on this printout are the fluxes broken down into ten energy groups. The energy interval spanned by each group is given in Table 2; the last entry in the second row of the printout specifies the relevant energy set in Table 2.

The first table, "Scattered Flux per Neutron at Region Boundaries in Energy Groups", gives the energy-dependent fluxes due to scattered neutrons (uncollided excluded) at what are termed "region boundaries." The slab configuration through which the machine program traces neutron trajectories is divided into eight sub-slabs by means of seven interior interfaces. Each time a neutron crosses such an interface its contribution to the flux (in the energy interval appropriate for the crossing in question) is recorded. A neutron may cross an interior interface any number of times. Generally speaking, however, once a neutron gets more than a few inches from a given interface, it seldom recrosses that interface. Thus, for most of the interior interfaces the number of recrossings is approximately the same as would take place in the interior of a semi-infinite medium of the same material.

In the Type 2 printout all fluxes (and doses) calculated except those in the first row of entries of the first table "Scattered Flux per Neutron at Region Boundaries in Energy Groups" involve the secants of the actual angles at which the neutrons cross the various interfaces, except that for angles whose secant is greater than eight, the value eight is substituted for the secant. In the first row of entries of the first table, and in all cases on the Type 1 printout, the fluxes and doses calculated are based on an average value of the secant for each of the angular regions into which neutrons are grouped. The Type 1 printout fluxes are usually about 3 or 4% higher than

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the Type 2, the value depending on the actual angular distribution. (This is apart from the difference between "Flux Transmission or Reflection Factor" and Flux Transmitted or Reflected per Incident Neutron" in accordance with the previously given definitions of these terms). It is readily shown* that the fluxes calculated with the greatest value of the secant limited to eight are, on the average, six percent low for an isotropic distribution; the error is smaller for a distribution which is peaked forward (which is almost always the case for transmitted neutrons). Thus fluxes and doses listed on the Type 2 printouts average about 4 to 6% low, while those on the Type 1 printout average 1 or 2% low.

The second table, "Scattered Flux Transmitted per Neutron in Energy Groups Versus Thickness," again contains the energy-dependent fluxes, but this time only a neutron's first crossing of an interface is tallied. Thus, for example, the entries in the 4" row (left hand or index column reads 4") for a 24" thick slab constitute the energy-dependent fluxes which would be transmitted per incident neutron by a 4" thick slab - just as though the slab being treated in the machine program were only 4 inches thick. This method allows the calculation of eight problems simultaneously.

In the third or bottom table in the printout, the entries are not broken down by energy group. The first four columns contain information similar to that in the immediately preceding paragraph: each row corresponds to a slab whose thickness is specified in the index column, the remaining thickness of the slab actually treated having no effect on the table entries. Each column in this table bears its own heading. The first column represents the number (we use this interchangeably with the term number current) transmitted per incident neutron, including the uncollided. The second and third columns are the flux and dose per incident neutron, again including the uncollided. The fourth column gives the uncollided contribution to the flux per incident

The authors are indebted to Dr. M. Kalos, United Nuclear Corporation, for this demonstration.

neutron*. The uncollided contribution to the number current is obtained from the entries in this column upon dividing by the secant of the incident angle; the uncollided contribution to the dose is obtained upon multiplication of the entries by the flux-to-dose conversion factor at the source energy from Table 3. (The machine program interpolates in a table in obtaining source energy flux-to-dose conversion factors.)

The final column in the bottom table provides information analogous to that in the first table, i.e., the result of every crossing of an interface by each neutron is contained therein. The uncollided contribution is also included here. Thus, the second and fifth columns of the bottom table represent a total over all energy groups (plus the uncollided) of the flux due to neutrons' first crossings of the various interfaces, and due to all crossings of the interfaces, respectively. The difference represents the effect of crossings other than the first.

In the first and third tables of the Type 2 printout, the first row of entries corresponds to zero inches, i.e., the incident face, the machine suppressing the zero. Since the first table refers to scattered neutrons only, the first row entries in this table are due solely to reflected neutrons. The first four columns of the third table refer to transmitted neutrons, so reflected neutrons are not included at the incident face (first row entries). The entry in the first row of the final column of the bottom table represents the sum of the fluxes due to the incident neutrons and the reflected neutrons.

DISCUSSION

For each of the three soil conditions: dry (natural), 50% saturated, and 100% saturated - treated in the order listed - the machine printouts are arranged in order of increasing energy; for each energy, they are arranged in

At each interface, the uncollided flux in this column is based on an integral number of neutrons (or zero). This does not affect any other entries on the printout. When splitting is used, uncollided as well as scattered neutrons are split upon crossing a splitting surface.

order of increasing angle with respect to the slab normal. The incident energies (in MEV) for which results are given are: 0.1, 0.25, 0.5, 1.0, 2.0, 3.0, 5.0 and 14.0. The incident angles (degrees) are: 0, 30, 45 and 70°. Following the thirty-two sets of printouts so arranged for each soil condition, there are a few miscellaneous printouts. The latter were calculated after a "splitting" technique had been added to the basic Monte Carlo machine program. The flux distributions are reliable to much greater depths for the split runs (which require much more machine time) but the information on reflection is not significantly improved by splitting.

Figures 1 - 4 have been included to show graphically the meaning of some of the tabular results. Figure 1 is a reflected energy histogram illustrative of information contained on the Type 1 printout. The reflected energy distributions are seen to vary slowly with incident angle for a given incident energy, there being relatively more reflected neutrons near the source energy at the larger angles of incidence. Figure 2 is also obtained from a Type 1 printout and is typical of reflected angular distributions generally. For the normal incidence curves shown on Figure 2, there are twelve points whereas on the curves for slant incidence there are four points. Since for the case of normal incidence the reflected neutron distribution has no azimuthal dependence, the twelve available angular regions are all used to obtain the dependence of the reflected distribution upon the polar angle. For slant incident neutrons there is an azimuthal dependence; this has been suppressed in Figure 2 by integration over the azimuthal angle. This accounts for the greater dispersion of the plotted points for the normal incidence curves as compared with that of the slant incidence curves.

Figures 3 and 4 are obtained from the Type 2 printout. The shapes of the curves in Figure 3 are typical for flux versus depth plots for various materials, incident angles and incident energies. The curves for neutron energies near the source energy peak a little sooner than those for lower energies since fewer collisions are required for energies near the source energy. Peaking occurs on the order of a mean free path inside the slab and the rate of decrease after the peak is very nearly the same for all neutron energies. This is in accord with the fact that a quasi-equilibrium neutron

distribution becomes established after a penetration distance of a few mean free paths*. In Figure 4, the shapes of the curves are again similar. This figure illustrates the difference between flux versus depth (slab thickness 24") and flux versus thickness in which case the slab thickness is equal to the value of the abscissa just as though the remainder of the 24" were not present. The difference between the two curves in Figure 4 represents the increase in flux due to neutrons bouncing back and forth across a surface on the slab interior.

The total flux is always much better determined statistically than are the fluxes in the various energy groups. The fact that the rate of fall off after reaching the peak is about the same for all groups and for the total can be used in graphing the behavior of the flux in a particular energy group. Knowing the behavior of the energy-dependent fluxes enables one to calculate the volume distribution of any desired type, of neutron interaction within a slab.

For certain problems which require detailed input information, it would be preferable to have the information in the form of analytical expressions fitted to the data since the handling of detailed information via tables is cumbersome, especially in hand computations. Many of the more important results conform to general patterns as depicted by the curves in the illustrative figures. Thus, one might expect a reasonable degree of success in fitting the results to analytical expressions. However, the tabular printouts contain a diversity of frequently useful information so that a large number of fits would be required. Those likely to be the most generally useful are not obvious at present. Further, each prospective user must place his own demands on the accuracy with which the analytical expressions fit the data, and the range over which each fit is valid. Therefore, the authors feel that the tabular display of results chosen is the most appropriate form of presentation.

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WILLIAM WRIGHT

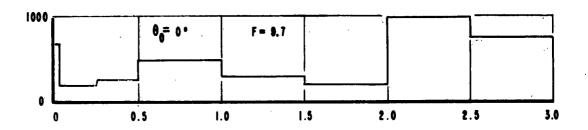
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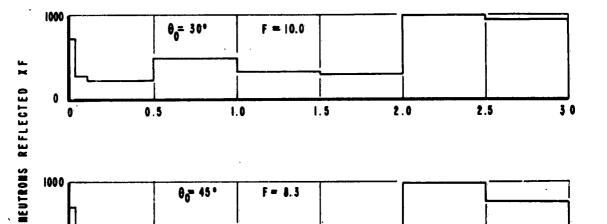
The bending down of the curves indicates a slow softening of the spectrum.

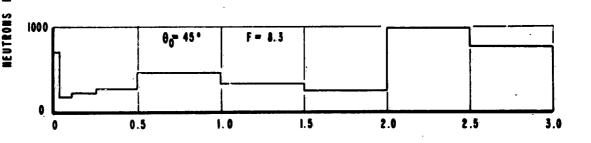
FIG. I - NEUTRON REFLECTED ENERGY SPECTRUM

SLAB MATERIAL - NEVADA TEST SITE SOIL (50% SATURATED)
INCIDENT ENERGY = 3 MEV
SLAB THICKNESS = 24 INCHES

00 = ANGLE OF INCIDENCE
F = ARBITRARY NUMBER
BASED ON RUN NOS. 689-692







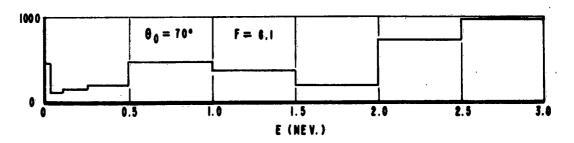


FIG. 2 - NEUTRON REFLECTED ANGULAR DISTRIBUTION

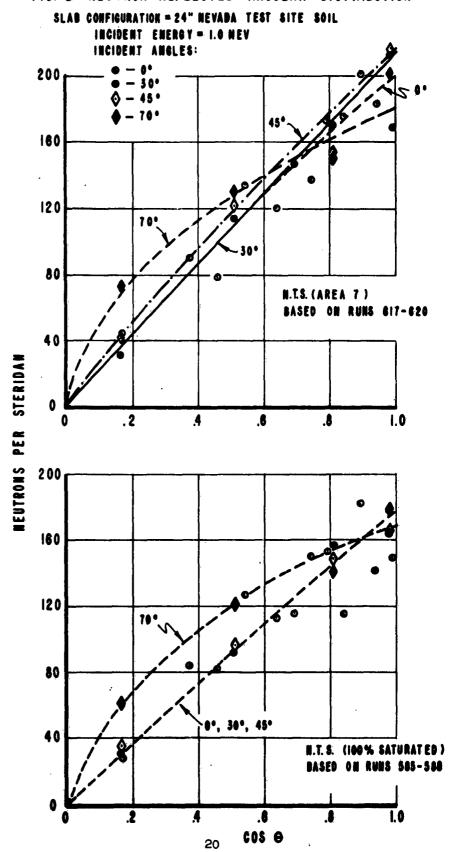


FIG. 3 - ENERGY DEPENDENT FLUX VS. DEPTH SLAB CONFIGURATION = 24" MEVADA TEST SITE SOIL (AREA 7)
INCIDENT ENERGY = 2 NEV ANGLE OF INCIDENCE = 0° NEUTRON ENERGIES

0 - 2.0 NEV.

♦- 10 EV -. 1.0 KEV

□- 1-1.5 MEV Δ- 1.5-2.0 MEV

HOLLOW SYNBOLS - RUN NO. 621 SOLID SYNBOLS - RUN NO. 23-S.

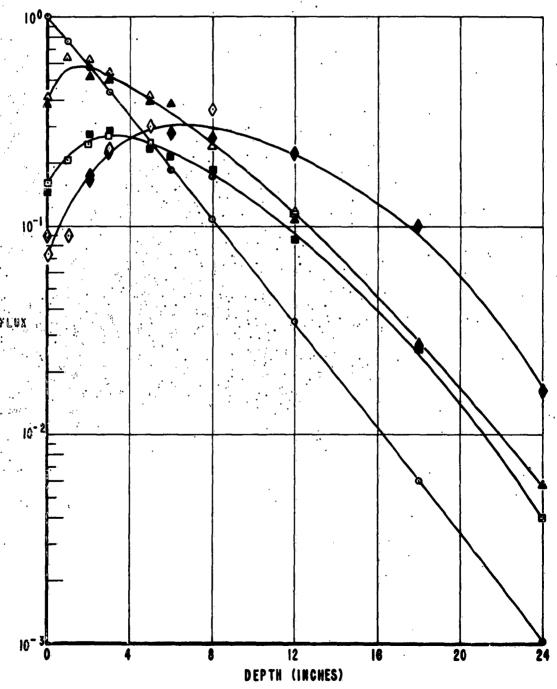


FIG. 4 - TOTAL FLUX VS. DEPTH AND TOTAL FLUX VS. THICKNESS

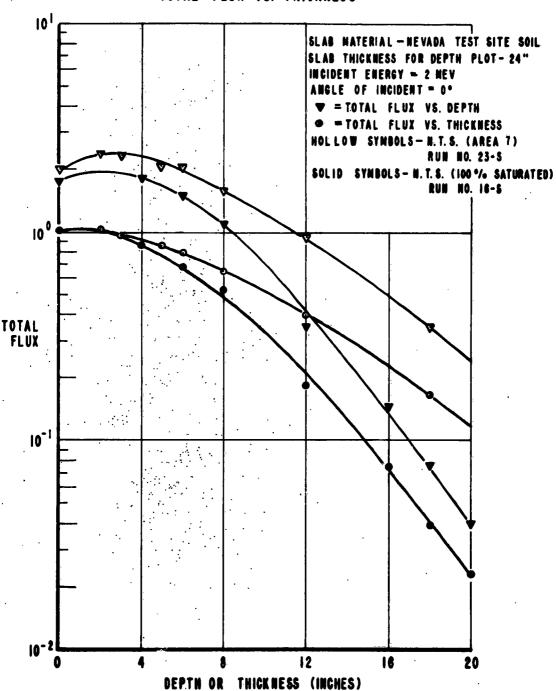


TABLE 1A

REFLECTION DATA FOR DRY NEVADA TEST SITE SOIL

	Ŋ	NUMBER AI	BEDO	N	NUMBER FLUX ALBEDO					
e o(Deg)	0	30	45	70	0	30	45	70		
0.1	.447	.476	.509	.641	.899	.821	.760	.497		
0.25	.542	.581	.611	.713	1.035	.985	.839	.561		
0.50	•574	.579	.634	.740	1.127	.978	.898	.560		
1.0	.656	.683	.696	.776	1.312	1.124	1.012	.618		
2.0	.516	.525	.584	.671	1.020	.869	.861	.496		
3.0	.445	.477	.518	.616	.866	.771	.729	.456		
5.0	. 387	.403	.450	•555	.787	.681	.629	.422		
14.0	.295	•292	.348	.479	•572	.498	•497	.369		
		DOSE AL	BEDO							
0.1	.132	.139	.164	.228	.583	.533	•497	.330		
0.25	.206	.239	.244	.347	•596	.582	.490	.356		
0.50	.214	.236	.264	.392	.620	•577	.528	. 384		
1.0	.342	. 3 66	.381	.442	.831	.734	.673	.426		
2.0	.244	.250	.278	.361	.70 8	.629	.607	.3 88		
3.0	.207	.229	.243	.310	•593	.550	.507	.327		
5.0	.175	.165	.202	.268	.519	.419	.412	.286		
14.0	.0693	.0760	.0892	.156	.327	.284	.293	.239		

TABLE 1B

REFLECTION DATA FOR 50% SATURATED NEVADA TEST SITE SOIL

		NUMBER	ALBEDO			NUMBER FLUX ALBEDO					
E _O (MEV)	0	30	45	70	0	30	45	70			
0.1	.431	.459	. 504	.612	.823	.810	.746	•475			
0.25	• 534	•551	.583	.669	1.003	.927	.783	• 509			
0.50	.530	• 555	.614	.712	1.035	.938	.879	• 557			
1.0	.647	.666	.686	•754	1.291	1.075	•977	• 586			
2.0	.490	.509	- 546	.656	.910	.830	.744	.494			
3.0	.415	.450	.505	.623	.851	.780	.718	. 454			
5.0	. 331	. 381	.424	.558	.642	.670	•599	.426			
14.0	.264	.3 06	•291	.436	. 525	•534	.400	• 347			
ENERGY ALBEDO						DOSE A	LBEDO				
0,1	.117	.120	.157	.221	.536	.514	.477	.316			
0.25	.212	.222	.248	.311	.589	.551	.472	. 314			
0.50	.180	.20 8	.261	.382	.546	.527	.532	· 387			
1.0	.317	. 344	.359	.418	.806	.689	.617	. 398			
2.0	.220	.235	.272	. 350	.634	•578	.532	. 385			
3.0	.1.88	.208	.227	.312	.572	-537	•495	.339			
5.0	.142	.171	.196	.282	.406	.422	• 397	. 305			
14.0	.0684	.0714	.0664	-144	.298	.295	.227	.228			

TABLE 1C

REFLECTION DATA FOR 100% SATURATED NEVADA TEST SITE SOIL

		NUMBER A	ALBEDO		NUMBER FLUX ALBEDO					
E _O (MEV)	0	30	45	70	0	30	45	70		
0.1	.396	.411	.448	.578	.746	.694	.651	457		
0.25	.467	.499	. 5 3 6	.633	.902	.855	.813	.476		
0.50	.480	.488	.560	.664	•915	.811	.828	.481		
1.0	.584	.590	• 594	.700	1,108	•996	.850	.566		
2.0	.420	.429	•475	.621	•775	.741	.643	.490		
3. 0	.367	•395	.442	• 572	•738	.707	.611	.418		
5.0	.289	.332	413	• 50 <u>.9</u>	•563	. • 567	•580·	.405		
14.0	.243	.253	.286	• 399	.501	.451	.429	. •295		
				•	•					
	·	ENERGY AI	LBEDO		DOSE ALBEDO					
0.1	.0938	.109	.117	.192	474	.447	.411	.298		
0.25	.160	.170	.209	.262	.499	.470	. 464	.282		
0.50	.168	.183	.229	310.	.490	.453	.490	.306		
1.0	.290	.293	.281	.362	.674	.624	-515	.3 66		
2.0	.184	.183	.209	.310	.511	.493	.418	.368		
3.0	.157	.180	.192	.262	.467	.489	.407	.296		
· 5 · 0	.119	.142	.166	.240	.350	.362	. 367	.277		
14.0	.0604	.0688	.0797	.115	.276	.271	.256	.190		

TABLE 2

ENERGY SETS AND FLUX TO DOSE CONVERSION FACTORS

							<u> </u>	\longrightarrow
T 2B	Conversion Factor (Rads/Unit Flux)	.64 × 10-9 .59 × 10-9 .1.3 ·1.3 ·1.4 ·1.4 ·1.4 ·1.4	SET 2E	Conversion Factor (Reds/Unit Flux)	.65 × 10 ⁻⁹	8. 8.	- G o	2.2
SET	Energy Interval (MEV)	999498989		Energy Interval (MEV)	.00010005	.001013	.06251 .1175 .17525	.3755
2A	Conversion Factor (Rads/Unit Flux)	.64 × 10 ⁻⁹ .59 .59 .1.3 2.0 2.1 4.0 4.3 4.3		Conversion Factor (Reds/Unit Flux)	6 <u>01</u> x 49.	. t. e. '	พ.ส.ช. ญ ๙	3.4
SET	Energy Interval (MEV)	.0001001 .001025 .0251 .125 .255 .5-1.0 1.0-2.0 2.0-3.0	SET 2D	Energy Interval (MEV)	.00001001	.0250625	.17525 .25375 .3755	.75-1.0
Т2	Conversion Factor (Rads/Unit Flux)		8	Conversion Factor (Rads/Unit Flux)	9-01x 49.	. i.	o a a a a	4.1
TES	Energy Interval (MRV)	.0001001 .001025. .0251 .125 .255 .5-1.0 1.0-2.0 2.0-3.0 5.0-5.0	SEE	Energy Interval (MEV)	.00001001	.0251	.3755 .3755 .575 .75-1.0	1.5-2.0
ENERGY	TROOP	10v4v0r805	ENERGY	GROUP	-10	l W ≄ I	~~ ~~ °	۲۵

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TABLE 3
FLUX TO DOSE CONVERSION FACTORS FOR SOURCE ENERGIES

E _o	Conversion Factor (D_E)
(MEV)	(Rads. per unit flux)
.1	1.1 x 10 ⁻⁹
.25	1.7
•5	2.4
1.0	3. 8
2.0	4.1
2.67	14.14
3.0	4.6
4.0	5.1
5.0	5.8
7.0	6.8
10.0	7.0
14.1	7.0*

Extrapolated

TABLE 4

HISTOGRAM 0-2541

Sector	Cos O	Cos 62	6	8	IO	Sec 6	Solid Angle
1	1.00000	.95833	0	16°35.9'	8018	1.0106	.26180
8	.95833	.91667	16 ⁰ 35.9'	23°33.41	20° 5'	1.0647	.26180
8	.91667	19998.	25°33.4'	29 ⁰ 55.6¹	26°45°	1.1198	31416
4	.86667	.81667	29 ⁰ 55.6¹	35014.81	32°35'	1,1868	31416.
5	.81667	19991.	35014.8	39°56.7'	37°36'	1.2622	.31416
9	.76667	.71667	39 ⁰ 56.7'	44°13.2°	42° 5'	1.3474	.31416
7	.71667	19999*	44°13.2'	148011.41	46°12°	3.4448	.31416
80	19999	.58333	48°11.4'	54°18.91	51015	1.5976	. 52360
6	. 58333	• 50000	54018.91	ون 0،	57° 9°	1.8435	.52360
91	.50000	19914.	,0 ₀ 09	65°22.51	62 ⁰ μ1'	2,1791	.52360
#	.41667	. 33333	65 ⁰ 22.5'	70 ⁰ 31.7'	67 ⁰ 57°	2.6637	.52360
ผ	. 33333	00000	70 ⁰ 21.7'	%	80°16'	5.9150	2.09440

TABLE 5

HISTOGRAM 9 Ø

, S	#	ĸ	2x/3	π/3	. x	Ju/14	π/2	4/x	H	34/4	π/2	π/ μ
- 12 12	0	24/3	x/3	, o	4/m2	π/2	π/μ	. 0	74/kg	π/2	π/h	. 0
Solid Angle	4/e	9/μ	u/6	π/6	9/μ	π/6	Ψ/e	π/6	¥/6	<i>π</i> /6	9/μ	۳/و
လူ ၁ ၅	1.0215	1.2340	1.2340	1.2340	1.9625	1.9625	1,9625	1.9625	5.9150	5.9150	5.9150	5.9150
IO	11047	35°52'	35°52'	35°52'	59°22'	59°22'	59°22'	59°221	90°16'	800161	80 <mark>0</mark> 16	80 <mark>0</mark> 16
• o	23°33.4"	48°11.4'	48011.4	148011.4'	70°31.7'	70031.71	70°51.7'	70°31.7'	%	%	°8	%
or	0	25°33.4'	23033.4"	. 25 ⁰ 33.4"	,4. TT ₀ 84	48011.4"	148011.4'	48°11.4°	70°31.7'	70°31.7'	70 ⁰ 31.7'	70°31.7'
Cos 62	11/15	2/2	2/3	2/3	1/3	1/3	1/3	ç/T	0	0	O	0
Cos O	1.0	टा/ा	21/11	टा/प	2/3	2/3	2/3	2/3	1/3	1/3	1/3	1/3
Sector	1	ผ	Ň	4	<u>1</u>	9	-	æ	6	10	#	21

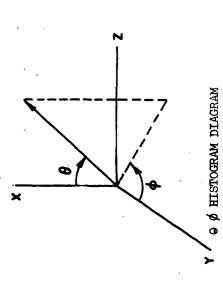


TABLE 6

ABEREVIATIONS USED ON MACHINE PRINTOUTS

Mean Free Path MFP. Incident INC. cos. Cosine EGY. Energy FLX. Flux Neutron NT. DSE. Dose NO. Number TRAN] Transmission TRANS REFL. Reflection FACT. Factor B-POLY. Polyethylene borated with 8% boron carbide by weight STER. Steradian Scattered SCAT. U UNC. Unscattered UNSCAT. ABS. Absorption GRPS. Groups TTL. Total

BDS.

Boundaries

TABLE 7

ATOMIC COMPOSITION OF NEVADA TEST SITE SOIL

Element	10 ²¹ at		
٠	Dry Soil	50% satSoil	100% sat. Soil
H	8.553	9.820	16.87
0	22. 68	23.30	27.00
Al	2.014	1.830	1.976
Si	9.533	8.680	8.963

The densities corresponding to these compositions are 1.15, 1.12, and 1.25 grams per cubic centimeter for dry, 50% saturated, and 100% saturated soil, respectively. These values differ slightly from the corresponding densities of 1.17, 1.14, and 1.29 grams per cubic centimeter given in Reference 2. The differences are due to replacement of various minor constituent atoms by silicon atoms in the calculations.

REFERENCES

- 1. Allen, F., Futterer, A. and Wright, W. Neutron Transmission Versus Thickness for Some Common Materials. ERL 1174, September 1962.
- 2. Krey, P. W., Wilsey, E. F., McNeilly, J. J., Peterson, D. D. and Bloore, E. W. Soil Activation by Neutrons (U). WT 1410. May 1960. Sec. RD.
- Goldstein, Herbert. Fundamental Aspects of Reactor Shielding. Addison-Wesley Publishing Co., Inc., 1959.
- 4. Allen, F., Futterer, A. and Wright, W. Neutron Reflection and Flux Versus Depth for Concrete. ERL 1189, January 1963.

MACHINE PRINTOHTS

```
RUN NUMBER
                                           COS. THETA
                                                         CUTOFF EGY.
                                                                       ENERGY SET
                            INC. ENERGY
                 605
                                                                            2E
                               -10000000
                                            1.00000000
                                                           .00001010
  SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                  2
                                                3
                                                              4
                   1
                .16663889
                               .04823401
                                             .20299813
                                                           .08816856
                                                                          .13040521
                                                                          .27032994
                .31861159
                               .06255956
                                             .41896745
                                                           .12358769
2
                .38826364
                               .08262187
                                             .47020680
                                                           ·13097707
                                                                          .31713554
3
                .45835455
                               .08468663
                                             •40770000
                                                           .13222504
                                                                          .30751656
 5
                .37990449
                               .08685671
                                             .37269795
                                                           .08531271
                                                                          .15967859
 8
                .30175522
                               .04033303
                                             .24216871
                                                           .04647931
                                                                          .08923526
                                                           .00970521
12
                .17694632
                               .02129441
                                             .10095702
                                                                          .04304854
18
                .02503046
                               .00333795
                                             .00237823
                                                           .00268359
24
  INCHES
                                  7
                                                              9
                   6
                                                                            10
                .26223670
 1
                .45045329
 2
                .38217600
                .29994868
 3
                .15498567
 8
                .09943450
12
                .00764260
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES .
                   1
                                  2
                                                3
                .01645992
                                                                          .12696318
 1
                               .00100307
                                             .09329517
                                                           .05102926
2
                .03485441
                               .02017659
                                             .12004020
                                                           .05436938
                                                                          .19943326
 3
                .08255806
                               .03286269
                                             .15040305
                                                           .07394455
                                                                          .18349900
 5
                .10944635
                               .04313081
                                             .14305672
                                                           .06524319
                                                                          .13331535
 8
                .12347173
                               .02048296
                                             .12379231
                                                           .02811259
                                                                          .07284256
                                             .05431065
12
                .06772818
                               .01026565
                                                           .00495359
                                                                          .02587509
                               .00333795
                                             .00237823
18
                .02074083
                                                           .00268359
24
  INCHES
                                  7
                                                                            10
                   6
                .25869744
 2
                .25938347
 3
                .23298923
                .14240886
 8
                .06798257
1.2
                -00764260
18
24
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TTL.FLX/NT.
              TOTAL NO.
                            TOTAL FLUX
  INCHES
              TRANS./NT.
                             TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                       REGION BDS.
                             1.00000000
                                            1.09999999
               1.00000000
                                                          1.00000000
                                                                         1.87171432
                .86399999
                             1.13544803
                                            1.09662053
                                                                         2.23250952
 1
                                                           .58800000
 2
                             1.03425730
                .73899999
                                             •92501667
                                                           .34600000
                                                                         2.11738092
 3
                .64099999
                               .95925658
                                             •79375680
                                                           .20300000
                                                                         1.89343147
 5
                .46099999
                               •70660128
                                             .53750287
                                                           .07000001
                                                                         1.30943612
                .26799999
                               .45068473
                                             .31758186
                                                           .01400000
                                                                          .83340603
12
                .10800000
                               ·17177576
                                             -11268663
                                                           .00100001
                                                                          .36059412
18
                .01500000
                               .02914060
                                             .01848790
                                                                          .03343022
```

24

•			•			•
	RUN NUMBER 605	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 12.739678	
	INC. ENERGY	COS. THETA	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 1.100000	
	•100000	1.000000	*000010	1.000000		
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)	,		
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	1 // () ()			.093000	.166639	.098468
Ž				.025000	.048234	.027186
3				.113000	.202998	.108881
4				.036000	.088169	.047290
5				.062000	.130405	.084171
6				•118000	.262237	.216941
7						
ė						
9						
10						
	Attab	DED OF SSATTE	OCD NEUTBONE	VE ANCLE		
		BER OF SCATTE				
. ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				.038000	.145149	.090188
2				.030000	•114591	•078564
3				.038000	.120957	.087166
4		•		.045000	.143239	.110000
5				.031000	•098676	.078016
6				.044000	.140056	.117984
7				.027000	.085943	.076551
8				.041000	.078304	.080440
9				.038000	.072574	.087956
10				.033000	.063025	-085430
11	k .			•030000	.057296	.103966
12			•	•052000	•024828	.097332
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN'. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.447000	.898681	.582938	0,13153	.868462	•001000	.552000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
1102.202618				0,02942		

```
RUN NUMBER
                             INC. ENERGY
                                           COS. THETA
                                                         CUTOFF EGY.
                                                                        ENERGY SET
                 606
                               .10000000
                                             .86603000
                                                            .00001010
                                                                            2E
  SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                  2
                                                3
                                                                             5
                   1
                .20513351
                               .05260452
                                             -20448999
                                                            .07271996
                                                                          .14067151
                .34503927
 1
                               .08221399
                                             .34823636
                                                            .14523630
                                                                          .36357300
 2
                               .11709950
                                                            .15456672
                .42694225
                                             .48732188
                                                                          .35161739
 3
                .51285510
                               .09732099
                                             •45750109
                                                            .15170773
                                                                          .29007608
                .39976802
                               .06684903
 5
                                             36064721
                                                            .11051329
                                                                          .21695464
 8
                .27002877
                               .06504304
                                             .14635179
                                                            .03756403
                                                                          .04176217
                .14732224
                               .02729846
                                             .07475258
                                                            .01381036
12
                                                                          .01575468
18
                .02184419
                                             ·00231400
                                                            .00131315
                                                                          .00132101
24
                                  7
  INCHES
                                                8
                                                               9
                                                                            10
                .27213149
 1
                .39036765
                .37445305
 2
 3
                .32587327
 5
                .11997361
 8
                .03658378
                .00328300
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                  2
                   1
                                                3
                                                               4
                                                                             5
                               .00239752
                .02477534
                                             .08582564
                                                            .04492943
                                                                          .18727243
 1
                .03988917
                               .01802066
                                             .12531280
                                                            .09627645
 2
                                                                          .19382177
 3
                .08206620
                               .02491717
                                             .16027188
                                                            .08964477
                                                                          .18224289
                                             •17077291
 5
                .10957758
                               •02354760
                                                            .07072953
                                                                          .18108836
 8
                .11792873
                               .03818779
                                             .09117057
                                                            .03480949
                                                                          .03844084
12
                .05737859
                               .01253710
                                             .04275728
                                                            .01381036
                                                                          .01123423
                                                            .00131315
18
                .01013750
                                                                          .00132101
24
  INCHES
                                                               9
                                                                            10
                                  7
                   6
                                                8
                .21323897
 1
 2
                .27007933
 3
                .24868541
 5
                .09978753
 8
                .03272090
12
                .00328300
18
24
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
              TOTAL NO.
                             TOTAL FLUX
                                                                        TTL.FLX/NT.
  INCHES
              TRANS . / NT .
                             TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                        REGION BDS.
               1.00000000
                              1.15469441
                                            1.27016384
                                                          1.15469441
                                                                         2.08224207
 1
                .84799999
                              1.18428370
                                            1.13541152
                                                            .62584437
                                                                         2.30051093
 2
                .71999999
                              1.08172564
                                             .95361837
                                                            .33832545
                                                                         2.25032626
 3
                .63299999
                               .97142472
                                             .79555762
                                                            .18359640
                                                                         2.01893068
 5
                .42499999
                               .70861945
                                             .51718220
                                                            .05311595
                                                                         1.32782174
                 .22399999
 8
                               .36134118
                                             .24473504
                                                            .00808286
                                                                          .60541644
12
                               ·14100056
                .08600000
                                             .08970720
                                                                          .28222132
18
                .00700000
                               .01277166
                                             .00832682
                                                                          .02679236
24
```

	RUN NUMBER 606	HISTORIES	ENERGY SET	ANGLE SET θφ	SLANT MFP 14.710436	
	INC. ENERGY .100000	COS. THETA .866030	CUTOFF EGY	INC.FLX/NT 1.154694	INC . DSE/NT 1.270164	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
•	REG	ION THICKNESS	SES (CENTIMETE	(RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
•	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .118000 .030000 .106000 .035000 .068000 .119000	NO.FLX.REFIL FACTOR .177652 .045557 .177094 .062978 .121826 .235674	DOSE REFL. FACTOR .104976 .025678 .094987 .033779 .078633 .194967
9 10						
10	NIIM	RED OF SCATTE	RED NEUTRONS	VS. ANGLE		
4MC+++ 4B				•	NO BEEL	DOCE DEEL
ANGUL AR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN- FACT/STER	NO. REFL. FACTOR .074000 .060000 .055000 .080000 .035000 .038000 .039000 .013000 .013000 .012000 .014000	NO. REFL. FACT/STER .141329 .114591 .105042 .152788 .066845 .072574 .074484 .072574 .034377 .024828 .022918 .026738	DOSE REFL- FACT/STER .079424 .074553 .071324 .103721 .071441 .078198 .083156 .082359 .121758 .089295 .075954 .086805
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .476000	NO. FLUX REFL. FACT. .820781	DOSE REFL. FACT. •533019	ENERGY REFL • FACT • Q13875	ENERGY ABS. FACTOR .861246	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR 523000
1102.205236		MEAN ENERGY SCAT .TR.NT.		MEAN ENERGY REFL. NT. QO2915		

```
COS. THETA
              RUN NUMBER
                            INC. ENERGY
                                                         CUTOFF EGY .
                                                                       ENERGY SET
                 607
                              -10000000
                                             •70711000
                                                           .00001010
                                                                            2E
  SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                                3
                                                           .08675252
                                                                          .16211399
                .15412552
                               .04505802
                                             .28804401
                .27536272
                                                           .19879787
                              .06443428
                                             .45712140
                                                                          .36421739
                .43510648
                              •09308406
                                             .54812027
                                                           -19644078
                                                                         .31541894
                                             •45509701
                .46426526
                               ·07038427
                                                           ·16930646
                                                                          .32335452
 5
                .38286472
                               .08765651
                                             .32701938
                                                           .08930315
                                                                          .19478293
 8
                .22262811
                               .04764773
                                             ·12963662
                                                           .03598349
                                                                          .06531064
                              .01970167
12
                .10030380
                                             •07857031
                                                           .00564688
                                                                          .00562460
18
                .02388650
                               •00211896
                                             .01256761
                                                                          .00142271
24
                .00334217
  INCHES
                                  7
                                                                           10
                .33850600
 1
                .42799655
· 2
                .42152258
                .30601327
 3
                .09376258
 8
                .02434447
                .00303311
12
18
                .00114666
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
                                  2
  INCHES
                                                3
                .00695991
                                             .08244786
                               .00558532
                                                           .07414181
                                                                          .22282900
 1
                .04012478
                                             .17238702
 2
                               .02374414
                                                           .11075971
                                                                          -21984986
 3
                .10364711
                               •01774005
                                             .20243584
                                                           .09960907
                                                                          .16935948
                .11709556
                               .01972739
 5
                                             17863033
                                                           .06519566
                                                                          .15711169
 8
                .09401593
                               .03015880
                                             .08614449
                                                           .02812157
                                                                         .05364258
                                             .05093876
12
                               .00445086
                                                           ·00564688
                                                                         .00562460
                -04407612
18
                .00913572
                                             .01126713
                                                                          .00142271
24
                .00334217
  INCHES
                                                                            10
                   6
                .28232598
 2
                .31405480
                .23942806
 3
                .08570593
 8
                .02283504
12
                .00303311
18
                .00114666
24
              TOTAL NO.
                            TOTAL FLUX
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TTL.FLX/NT.
                                           TRANS./NT.
                                                         TRANS./NT.
  INCHES
              TRANS./NT.
                            TRANS./NT.
                                                                       REGION BDS.
               1.00000000
                             1.41420712
                                            1.55562783
                                                          1.41420712
                                                                         2.44314667
                              1.34179564
                                                           .66750575
                .80499999
                                            1.28263600
                                                                         2.45543598
 2
                .67999999
                              1.19628849
                                            1.02878449
                                                           .31536820
                                                                         2.32506131
                                             •77921293
                                                           .14849175
 3
                .57699999
                               .98071136
                                                                         1.93691254
 5
                                             •47044929
                                                           .03252675
                .38799999
                               .65599332
                                                                         1.20791603
 8
                .19800000
                               .31774683
                                             .21015047
                                                           .00282841
                                                                          .52837949
12
                               .11377034
                                             .07157569
                .07100000
                                                                          .21288038
18
                .01000000
                               .02297223
                                             .01480364
                                                                          .04114245
                .00200000
                               .00334217
                                             .00206183
                                                                          .00334217
```

	RUN NUMBER 607	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 18.016543	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC .DSE/NT	
	- 100000	.707110	.000010	1.414207	1.555628	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
. •	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	-	
ENERGY GROUPS 1 2 3 4 5	NO. TRAN. FACTOR .002000	NO. FLUX TRAN.FACTOR .002260	DOSE TRAN. FACTOR .001336	NO. REFL. FACTOR .084000 .026000 .147000 .036000	NO.FLX.REFL FACTOR .108984 .031861 .203679 .061344 .114632	DOSE REFL. FACTOR .064399 .017958 .109246 .032903 .073990
6 7 8 9 10				•149000	.239361	.198017
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3	NO. TRAN. Factor	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .076000 .064000	NO. REFL. FACT/STER .145149 .122231 .118411	DOSE REFL = FACT/STER
4 5 6 7	•001000	•001910	•000985	.068000 .039000 .040000	.129870 .074484 .076394 .078304	.075765 .068306 .068498 .069077
8 9 10 11 12	•001000	•031910	•001566	.046000 .015000 .018000 .023000 .017000	.087853 .028648 .034377 .043927 .032468	.078208 .087796 .099415 .112850 .089249
(S+U) NO. TRAN.FACT. .002000	(S+U) DOSE TRAN. FACT. .001336	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT. .002000	SCAT.NO.FLX TRAN. FACT. .002260	SCAT. DOSE TRAN. FACT. .001336	SCAT. EGY. TRAN. FACT.
NUMBER REFL FACT. •509000	NO. FLUX REFL. FACT. .759860	DOSE REFL • FACT • •496513	ENERGY REFL. FACT. Q16363	ENERGY ABS. FACTOR .836363	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .488000
1102.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q03215		

```
RUN NUMBER
                            INC. ENERGY
                                           COS. THETA
                                                         CUTOFF EGY.
                                                                       ENERGY SET
                 608
                               •10000000
                                             .34202000
                                                           .00001010
                                                                            2Ē
  SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                   1
                                                3
                .19469851
                               •03383353
                                             ·30885552
                                                           .14266199
                                                                          +28205750
                               .10370986
                .29554133
                                             •43879322
                                                           .17792065
                                                                          •41807593
 2
                .30744279
                               .08251019
                                             .38383342
                                                           .16289804
                                                                          .30939064
 3
                .37014519
                               .06373921
                                             ·39214662
                                                           .15129565
                                                                          .20082252
 5
                .29922221
                               ·05646668
                                             .24555392
                                                           .06910384
                                                                          .07687636
 8
                .18203386
                               .03760717
                                             .10578248
                                                           .02751216
                                                                          .02198088
12
                .03947190
                               .01884885
                                             .04179344
                                                           .00635826
                                                                          .00207508
18
                .01035479
                                             .00104660
24
  INCHES
                                  7
                                                                            10
                .49072049
 1
                -59887121
 2
                .29536579
 3
                .14216614
                .04929032
 5
 8
                .01092211
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                  2
                                                3
                   1
                               .01438933
                                             .07692677
                .02437073
                                                           .08933621
                                                                          .21028860
                               •02698702
                                             .14554289
 2
                .04251401
                                                           .09636785
                                                                          .20547475
 3
                .08891903
                               •01706041
                                             .14541003
                                                           .10852168
                                                                          ·16307556
 5
                .10542996
                               .03485600
                                             •14955291
                                                           .05391929
                                                                          .05913024
 8
                .07772728
                               •01742099
                                             .06462148
                                                           .02016120
                                                                          .02198088
                .02176505
                               .00981788
                                             .02438920
                                                            .00635826
                                                                          · 00207508
12
                .01035479
                                             .00104660
18
24
  INCHES
                                  7
                                                                            10
 1
                 .43181859
 2
                .22659922
 3
                 .11862090
 5
                .04821452
 8
                .00785585
12
18
24
              TOTAL NO.
                            TOTAL FLUX
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TTL.FLX/NT.
  INCHES
                                           TRANS./NT.
                                                         TRANS./NT.
              TRANS./NT.
                             TRANS./NT.
                                                                       REGION BDS.
               1.00000000
                              2.92380562
                                            3.21618617
                                                          2.92380562
                                                                         4-32954241
                .64099999
                              1.46697702
 1
                                            1.39404682
                                                            .61984678
                                                                         2.65275898
 2
                .48799999
                               .87213319
                                             .70355514
                                                            .12864747
                                                                         1.67008831
 3
                .39799999
                               •66792186
                                             •48324961
                                                            .02631424
                                                                         1.34662958
                 .26399999
 5
                               •45110291
                                             .29973038
                                                                          • 79651333
 8
                .12200000
                               -20976769
                                             .13468667
                                                                          .38583866
12
                 .03700000
                               .06440548
                                             .04041979
                                                                          .10854754
18
                 .00800000
                               -01140140
                                             .00718557
                                                                          .01140140
```

24

	RUN NUMBER 608	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 37.248343	
	INC. ENERGY .100000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC .DSE/NT 3.216186	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
	RFG	ION THICKNESS	FS (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	Num	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .099000 .019000 .146000 .068000 .119000	NO.FLX.REFL FACTOR .066591 .011572 .105635 .048793 .096469 .167836	DOSE REFL. FACTOR .039349 .006522 .056659 .026171 .062266 .138846
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12 (S+U) NO•	NO. TRAN. FACTOR	NO. TRAN. FACT/STER UNSCAT.	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .079.000 .079.000 .062.000 .079.000 .045.000 .056.000 .083.000 .016.000 .018.000 .020.000 .053.000	NO. REFL. FACT/STER .150879 .133690 .118411 .150879 .085943 .114591 .106952 .158518 .030558 .034377 .038197 .101222	DOSE REFL. FACT/STER .032920 .035855 .032836 .040552 .038225 .052990 .044867 .068967 .045030 .046224 .046119 .145311 SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER REFL. FACT. .641000	NO. FLUX REFL. FACT. .496896	DOSE REFL. FACT. •329814	ENERGY REFL. FACT. Q22762	ENERGY ABS. FACTOR .772373	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .358000
1102.205236		MEAN ENERGY SCAT .TR.NT.		MEAN ENERGY REFL. NT. Q03551		·

CUTOFF EGY. RUN NUMBER INC.ENERGY COS. THETA ENERGY SET ·25000000 609 1.00000000 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 .14232271 .02883862 .15013142 •07098048 .10810030 -20452989 .04685057 .11958142 1 .35475543 .24014619 2 .28461594 •09127361 .37838185 .12449709 .27764465 3 .37265591 ·08590851 •42184162 .13222799 .22083246 5 .37072847 .33292134 .07999209 •07049241 ·10405866 8 .17355827 .01531754 .14819130 .04078027 .06078767 .09123586 12 **.02618161** .05848088 .01568537 .01698180 .04965386 •00734571 .01390014 .00100127 18 ·00929525 24 .00217574 INCHE'S. 6 7 8 10 .04894842 -13928622 .34624441 .14051696 ·24835553 ·52483503 2 .13783844 .22290936 .45193604 .14948641 .20979210 .37744025 3 5 .08482767 .10669295 .12473531 8 .02579004 .03283040 .04414365 .00429651 .00525646 12 .00240021 ïö 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 1 3 4 .00410787 .00176084 .03196581 .02746321 .04852291 .01471516 .06345140 .03843583 .11105148 2 .01038135 .06404206 .01935306 -11342687 .04434214 3 .09102801 5 .11397688 .01568516 .14322435 .03573144 .06033680 .07401423 .01312219 •08119061 .01511932 .04378617 R .05917330 .01694577 .03832420 .01150271 12 .01414942 .01398852 .00520171 .00474152 .00100127 .00314802 18 24 .00217574 INCHES 7 R 10 6 .03357201 .07906557 .27175191 2 .04739087 .10201261 .29151528 .09890726 3 .07960916 .25638304 5 .05812534 .07901809 ·08929915 8 .02245416 .02185209 .02476240 •00322596 12 .00240021 .00247578 18 24 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 1.00000000 1.58750000 1.000000000 2.01711505 .81599999 1.03321014 1.46669369 •53500000 2.41457101 1.21878362 .28599999 2 .67799999 .96495400 2.25509699 1.03482047 3 .58399999 .92009339 ·15300000 2.12318523 5 .39299999 .63839722 .58759964 .04300000 1.31744890 R .00599999 .54739916 .19499999 .30230117 .23801348 12 .08900000 .14819735 .09839652 .22051868 18 .02000000 .02808105 .01768664 .08119623

.00128041

.00217574

.00217574

24

·	RUN NUMBER 609	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 15.001853	•
	INC. ENERGY	COS. THETA 1.000000	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)		•	
	REG	ION THICKNESS	ES (CENTIMETE			
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	,	. •
ENERGY GROUPS 1	NO. TRAN. FACTOR .002000	NO. FLUX TRAN.FACTOR .002130	DOSE TRAN. FACTOR .000815	NO. REFL. FACTOR .075000	NO.FLX.REFL FACTOR .142323	DOSE REFL. FACTOR .054417
2 · · · · · · · · · · · · · · · · · · ·				.019000 .084000 .036000	.028839 .150131 .070980	.010518 .052104 .024634
5 6 7 8				.060000 .030000 .065000 .173000	.108100 .048948 .139286 .346244	.045148 .026202 .098320 .285142
9 10						
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS	NO. TRAN. FACTOR .001000	NO. TRAN. FACT/STER .003820	DOSE TRAN. FACT/STER .001476	NO. REFL. FACTOR .051000	NO. REFIL. FACT/STER .194805	DOSE REFL. FACT/STER .107336
2 3 4	•001000	•003183	•001363	.046000 .037000 .041000	.175707 .117774 .130507	.099542 .072064 .082420
5 6 7 8				.034000 .049000 .042000 .059000	.108225 .155971 .133690 .112681	.069932 .118197 .118301 .105320
9 10 11 12				.051000 .044000 .040000	.097403 .084034 .076394 .022918	.104796 .096259 .131611 .080307
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT. .000815	UNSCAT.	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .542000	NO. FLUX REFL. FACT. 1.034853	DOSE REFL. FACT.	ENERGY REFL. FACT. 020623	ENERGY ABS. FACTOR •793758	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .455000
1702.202618		MEAN ENERGY SCAT TRONT		MEAN ENERGY REFL. NT. Q09513		

```
RUN NUMBER
                            INC.ENERGY
                                                         CUTOFF EGY.
                                           COS. THETA
                                                                       ENERGY SET
                  610
                               •25000000
                                             .86603000
                                                           .00001010
                                                                            2E
  SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                   1
                                  2
                                                              4
                                                3
                                                                             5
                .11578950
                               .03061152
                                             .18519651
                                                           .08563100
                                                                          .08455600
                .23008514
 1
                               .03854144
                                             •31972132
                                                           .14404331
                                                                         ·23020590
                              .06624520
 2
                .26225086
                                             .29684283
                                                           15571839
                                                                         .21819778
 3
                .30181424
                              .07310228
                                             .33689499
                                                           .12884238
                                                                          .18622143
 5
                .36647995
                              •05214007
                                             .29885214
                                                           .06404295
                                                                         .10486847
 8
                .20268842
                              .02781803
                                             ·13639455
                                                           .03198148
                                                                         .05285125
12
                .10323669
                              .01264115
                                             .06236112
                                                           .01468900
                                                                         .00605993
18
                .01369648
                               .00554650
                                             .00652815
                                                           .00107228
                                                                         .00916618
24
                                             •00202903
  INCHES
                                  7
                   6
                                                8
                                                              9
                                                                            10
                .06077502
                              .15323252
                                             .42148649
                .18347798
                                             .59840475
                              .26665420
                ·16114599
                              ·24836401
                                             •46696936
 3
                .17849201
                              •19162619
                                             .36540820
                -08492159
 5
                              .09737470
                                             .08718378
 8
                .03329754
                              .02331044
                                             .03359014
12
                .00467658
                               .01422176
                                             .00241049
18
                .00147399
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                  2
                                                3
                                                              4
                                                                            5
                                             .02778450
 1
                .01240860
                              .00286686
                                                           .01369836
                                                                         .05249267
 2
                .02646240
                                             .05768143
                              •00106854
                                                           .02616439
                                                                         .07272237
 3
                .05846037
                              .02053183
                                             .09510547
                                                           .06452170
                                                                         .09228445
 5
                .09535346
                              .02058430
                                             •13906249
                                                           .03009965
                                                                         .05222045
 8
                .08264598
                              .02051409
                                             •07296911
                                                           .01830852
                                                                         .03309970
                .04379212
12
                              .00647223
                                             -03481728
                                                           .01213954
                                                                         .00605993
18
                .00849896
                              .00554650
                                                           .00107228
                                                                         .00301895
24
                                             .00202903
  INCHES
                                                8
                                                              9
                                                                           10
                .05743099
                              .09799175
 1
                                             .30238012
 2
                .08761769
                              .11765061
                                             .30294023
 3
                .08691477
                              .11407953
                                             .23297547
 5
                              .06742913
                .06061069
                                             .07244874
 8
                              .01645242
                                             .02717232
                .03121353
12
                              .00595996
                                             .00241049
18
                .00147399
24
              TOTAL NO.
                            TOTAL FLUX
                                          TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TTL.FLX/NT.
                            TRANS./NT.
  INCHES
              TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                       REGION BDS.
               1.00000000
                             1.15469441
                                           1.83307737
                                                          1.15469441
                                                                        2.26148789
                .78699999
                             1.12823532
                                           1.59454214
                                                                        2.57231554
                                                           .56118149
 2
                .62999999
                              .96481555
                                           1.23542495
                                                           .27250788
                                                                        2.14824230
 3
                .53299999
                              .89650875
                                             •99117679
                                                           .13163516
                                                                        1.89403689
 5
                .36299999
                              .56898567
                                             .51281713
                                                           .03117676
                                                                        1.18704040
 8
                .19100000
                              .30583974
                                             -24078284
                                                           .00346409
                                                                         .54539592
12
                .06700000
                              -11165155
                                             .07428725
                                                                         .22029672
18
                .01300000
                              .01961068
                                            -01261845
                                                                         .03748358
```

.00202903

.00202903

·	RUN NUMBER 610	HISTORIES	ENERGY SET	: Angle set &\phi	SLANT MFP 17.322556	
	INC. ENERGY .250000	COS. THETA .866030	•000010	INC.FLX/NT 1.154694	INC.DSE/NT 1.962980	
SLAB CONFI	GURATION NE	VADA TEST SITE	SOIL (AREA,7	')		
2.5400 15.2400	REG 2.5400 15.2400	FION THICKNESS 2.5400	ES (CENTIMETE 5.0800	7•6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .067000	NO.FLX.REFL FACTOR .100277	DOSE REFL. FACTOR .038341
2 3 4 5	•001000	•001700	•000590	•012000 •095000 •041000 •049000	.026510 .160386 .074159 .073228	.009669 .055663 .025738 .030583
6 7 8 9				.033000 .084000 .200000	.052633 .132704 .365020	.028174 .093673 .300605
10						
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .092000 .065000 .071000	NO. REFL. FACT/STER .175707 .124141 .135600	DOSE REFL. FACT/STER .082480 .082025 .081149
4 5 6 7	•001000	•001910	•001126	.091000 .047000 .051000	.173797 .089763 .097403	.114009 .090543 .093445
8 9 10 11			·	.050000 .018000 .015000	.095493 .034377 .028648	.101751 .118782 .087302
12				•015000	•028648	.084079
(S+U) NO. TRAN.FACT. .001000	(S+U) DOSE TRAN. FACT. .00.0590	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT. .001000	SCAT.NO.FLX TRAN. FACT. .001700	SCAT. DOSE TRAN. FACT. .000590	SCAT. EGY. TRAN. FACT. Q00004
NUMBER REFL. FACT. •581000	NO. FLUX REFL. FACT. .984917	DOSE REFL. FACT. .582446	ENERGY REFL. FACT. Q23915	ENERGY ABS. FACTOR .760799	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .417000
1702.205236		MEAN ENERGY SCAT.TR.NT. Q00964		MEAN ENERGY REFL. NT. Q10291		

```
CUTOFF EGY.
              RUN NUMBER
                             INC. ENERGY
                                           COS. THETA
                                                                        ENERGY SET
                  611
                               .25000000
                                             •70711000
                                                            .00001010
                                                                            2E
  SLAB CONFIGURATION NEVADA TEST SITE SOIL
                                              (AREA 7)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                                 3
                                                                              5
                .12578752
                               .04221652
                                             .19296600
                                                            .06713000
                                                                          .11307151
                .24147571
                               05902070
                                             .32554470
                                                            .13516621
                                                                          .23976307
 2
                 .25106998
                               .04885992
                                              32469032
                                                            .15410247
                                                                          .26982414
 3
                .26110985
                               .07622351
                                             .34994832
                                                                          .20573514
                                                            ·13167656
 5
                .31232107
                               ·06145685
                                             .25594598
                                                            .07375911
                                                                          •12422469
                .20109981
 8
                               .02879589
                                             -16049879
                                                            .05364033
                                                                          •07066252
12
                .07555986
                               .01907035
                                             .05602946
                                                            .01156225
                                                                          .00482255
18
                .01942473
                               .00355171
                                                                          .00225541
                                             .01040651
                 .00449029
24
                                              .00337982
  INCHES
                    6
                                  7
                                                 8
                                                               9
                                                                            10
                .07556153
                               .14984047
                                             •42023101
                .15380969
 1
                               .26367738
                                             .64554867
 2
                .14935703
                               .24217104
                                             .49084961
 3
                .13152387
                               ·21174756
                                             .26317488
 5
                .06843980
                               .08588228
                                             .09407579
 8
                .02130919
                               .02199534
                                             .01028673
12
                               .00105989
                .00746682
18
                .00236006
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                    1
                                  2
                                                 3
                                                                              5
                .00277587
                               .00342208
                                             .0376:1569
                                                            .02144027
                                                                          .05206375
 2
                .02004524
                               .00481298
                                             .05454719
                                                            .06029488
                                                                          .10246474
 3
                .05906553
                               .02264429
                                             .11291105
                                                            .05257570
                                                                          .09787213
 5
                .08970556
                               .02732636
                                             .11434717
                                                            .04626527
                                                                          .09124871
 8
                .09356951
                               .01502613
                                             •07594798
                                                            .03112509
                                                                          .05108263
12
                               .01100459
                .02700521
                                             .03728395
                                                            .01001466
                                                                          .00482255
                .00897697
                               .00107783
                                                                          .00225541
18
                                             .01040651
24
                 .00449029
                                              .00337982
  INCHES
                                                               9
                                                                            10
                    6
                                                 A
 1
                .04872760
                               .12198282
                                             .39437460
 2
                 .07565779
                               .14017598
                                             32433687
 3
                .09058872
                               .11294291
                                             ·19750997
 5
                 .04422869
                               .07349042
                                             .07078796
 8
                 .01922518
                               .01956757
                                             -01028673
12
                .00746682
                               .00105989
18
                 .00236006
24
                             TOTAL FLUX
              TOTAL NO.
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                        TTL.FLX/NT.
  INCHES
              TRANS./NT.
                             TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                        REGION BDS.
               1.00000000
                              1.41420712
                                            2.24505380
                                                           1.41420712
                                                                         2.54709572
                                            1.79799997
                .75999999
                              1.26647022
                                                            .58406754
 1
                                                                         2.64807368
 2
                                                                         2.17133973
                .59799999
                              1.02275087
                                            1.27232955
                                                            .24041522
 3
                .49599999
                               .84510481
                                             .89618873
                                                            .09899451
                                                                         1.73013421
                               .57437063
 5
                 .33699999
                                             •50150764
                                                            .01697049
                                                                         1.09307607
 8
                 .19100000
                               .31583082
                                             -22489969
                                                                          .56828860
12
                .06800000
                               .09865767
                                             .06426052
                                                                          .17557117
                               .02507678
18
                 .01500000
                                             ·01640106
                                                                          .03799842
                               ·00787012
                                             -00483058
24
                .00400000
                                                                          .00787012
```

			· · · · · ·			*
	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 21.215727	٠.
	INC. ENERGY	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 2.404152	
SLAB CONFI	GURATION NE	ADA TEST SITE	SOIL (AREA 7)		•	
	REG	ION THICKNESS	ES (CENTIMETE	RS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	. *
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1 .	.002000	.005055	.001933	.082000	.088946	.034009
2 .				.022000	.029852	.010887
3	.002000	.002260	•000784	.098000	.136448	.047356
4	-			.040000	.047468	016474
5				.056000	.079954	033393
6				.039000	.053430	.028601
7				.061000	.105954	.074791
8				.213000	.297150	.244711
9					• - •	4
10						
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER:
1	FACTOR	FACI7 SIER	PACIFER	•088000	•168067	•066979
2				.084000	•160428	.078609
3				•068000	.129870	.064209
4	.002000	.003820	•001216	•093000	•177616	•090304
5	.001000	•001910	•000920	•059000	.112681	.086120
6	•001000	•001910	•000720	•042000	-080214	.061737
7				.056000	106952	.080975
ė				•058000	.110772	.096113
9				.013000	.024828	.068181
10	•001000	•001910	•003054	.011000	.021008	.054319
11	•••••	••••	*****	•018000	.034377	.083452
12				.021000	.040107	.105255
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.004000	.002717	NOT THE TOTAL	•004000	.007315	.002717	0,00005
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.611000	.839201	.490221	024387	.756076	.001000	.384000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
1702.205236		0,00305		0,09978		,

CUTOFF EGY. RUN NUMBER INC.ENERGY COS. THETA ENERGY SET 612 .25000000 .00001010 2E ·34202000 SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 2 3 1 ·10963500 .02308003 ·18647754 .09005953 .15111700 -21405700 .03904709 .20476460 1 15388987 .19955145 2 .24606051 .02782703 .31246304 .12577547 .18445894 3 .26414007 .06292419 .23672646 .09720521 .13920200 5 .23389106 .18658234 .04287357 .06139878 .06306436 .02047408 8 .13463828 .02330602 .10919572 .02566324 12 .05103357 .01110516 .03206635 .00814246 18 .01449366 .00452990 .00778483 24 .00351678 INCHES 7 Ŕ 9 10 6 .12026:549 .18209601 .77628552 1 .13899239 .26614969 .64289286 2 .18249288 .09885688 .33616500 3 .10861839 .12976297 .15123442 .04784352 5 ·06676632 •04602074 8 .02203117 .00505961 .00593790 12 .00273223 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 1 3 4 1 .00967244 .01480104 .02631783 •04002177 .04773510 2 .02936742 .00836162 .08610220 .05941717 .09454601 3 .05895849 .01224715 · 17598168 .04333177 • 07555504 .01497605 .04996144 5 .08119005 .05654431 .03979422 .06997330 8 .05805704 •00857159 .01929335 .01945004 .01939523 12 .00310403 .02665987 .00814246 18 .01054506 .00396798 .00452990 24 .00351678 INCHES 7 8 9 10 6 .06174992 .13607529 •44242259 .11868997 2 .04556576 .24528914 3 .07350699 .10175544 .11945075 .03708277 5 .05144821 .03102503 8 .01546740 •00505961 .00593790 12 .00273223 18 24 TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TOTAL NO. TOTAL FLUX TRANS./NT. REGION BDS. INCHES TRANS./NT. TRANS./NT. TRANS./NT. 1.00000000 2-92380562 4.64154142 2.92380562 4.45251428 1.72424573 -56199999 1.24660487 .46780890 2.32715385 .42299999 .84974159 .07309517 2 •76043442 1.58719488 .34299999 .59248253 .57553638 .01169521 3 1.20150894 .23399999 .74844070 ·40202208 .32371136 8 .11800000 -20181024 .13929912 .34630604 .04100000 .06003382 .03762031 .10507978 .01904295 .01212915 18 •00900000 .02680839

.00222699

.00351678

.00351678

.00100000

24

	RUN NUMBER 612	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 43.862503	•
	INC. ENERGY	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC . DSE /NT 4 . 970469	
SLAB CONFI	GURATION NE	VADA TEST SITE	SOIL (AREA 7))		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5-0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3	NO. TRAN. FACTOR .001000	NO. FLUX TRAN.FACTOR .002023	DOSE TRAN- FACTOR •000773	NO. REFL. FACTOR .056000 .014000 .087000	NO.FLX.REFL FACTOR .037497 .007894 .063779	DOSE REFL. FACTOR .014337 .002879 .022135
4 5 6 7 8				.051000 .066000 .056000 .068000 .315000	.030802 .051685 .041133 .062280 .265505	.010690 .021586 .022018 .043963 .218651
9 10	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3 4 5	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .086000 .076000 .079000 .083000 .047000 .065000	NO. REFL. FACT/STER .164247 .145149 .150879 .158518 .089763 .124141	DOSE REFL. FACT/STER .033300 .038653 .037695 .041469 .036422 .054700
7 8 9 10 11	•001000	•001910	•001477	.063000 .089000 .024000 .024000 .033000	.12C321 .169977 .045836 .045836 .063025 .064034	.042092 .070724 .066524 .060229 .086025
(S+U) NO. TRAN.FACT. .001000	(S+U) DOSE TRAN. FACT. .000774	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT. .001000	SCAT.NO.FLX TRAN. FACT. .002023	SCAT. DOSE TRAN. FACT. .000774	SCAT. EGY. TRAN. FACT.
NUMBER REFL: FACT. .713000	NO. FLUX REFL. FACT. .560576	DOSE REFL. FACT. .356260	ENERGY REFL. FACT. Q34687	ENERGY ABS. FACTOR .653117	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .286000
1702.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q12162	·-•	

CUTOFF EGY. RUN NUMBER INC.ENERGY COS. THETA ENERGY SET 613 •50000000 1.00000000 €00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 1 2 3 .11226772 .02361681 •13651341 .03820740 . 13424687 1 .18487652 .04066385 .21311405 .16795154 .10440473 2 .27758961 .05945410 .26014368 .08373144 .16965939 3 .32342819 •07095954 •31387829 •09845906 · 19036371 5 .30791257 .05744837 •27538969 .05987226 .08989731 8 .32775288 .05321180 .16519654 .03924350 .06996406 12 .09874829 .02620402 •07869345 •00991133 • 02253996 18 .02928441 .00648781 •01649071 .03196633 .00107392 24 .00678611 .00329080 .00149844 INCHES 7 8 6 10 .06392720 .07966792 .06369339 .21363008 . 26110451 1 .09490129 -11686089 •09660901 .32715722 •71684027 2 .13334510 .15319150 .12116454 ·37001319 .60414684 3 .11112883 .17379842 .12493318 ·37787535 .45309672 5 .08434371 .08919947 .09555204 .17726647 .19082433 8 .04519428 .08825406 •02171359 .06713205 .03508163 12 .00438598 .02138613 •00431082 ·01577850 .00527741 18 .00234832 .00109008 .00110128 .00105651 24 .00105651

INCHES	1	2	3.	4	5
1		•00190522	•00234436	•00889828	03398258
2	•00907727	•00588350	•02918677	•01733194	• 03244356
3	•03030318	•01794670	•03927536	•02149823	· 05516178
5° 8	.07192502	•01079373	·10308742	•02480051	• 03909893
8	•08990925	•01748334	•08670718	•01569934	• 03966509
12 .	•04336400	•00391427	•04448169	•00598432	• 02129803
18	•00993406	•00371993	•01463236	•00107392	•01536892
24	•00678611		•00329080		• 00149844
INCHES	6	7	8	ý	10
1	•00925318	•02979 7 58	•02264693	•06667497	• 43961882
2	•03773204	•03673986	•03857459	•14463756	• 42126014
3	•02850470	•06288108	•04016256	•18488469	• 32588889
5	•04771051	•05072419	•05313294	•09878604	•13734228
8	•02849699	•06465093	•01079080	•04394325	• 03134287
12	•00438598	•01587.089	•00239839	•01296057	•00527741
18	•00234832	•00109008	•00110128	•00105651	
24				•00105651	•
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS#/NT.	REGION BDS.
MCNES	1.00000000	1.00000000	2.40000000	1.00000000	2.04529301
1	•85899999	1.14512192	2.50090679	•53000000	2.59337937
2	•71499999	1.05386723	2.08636055	• 28099999	2.51343938
3	•60999999	•95450717	1.69049908	•14800000	2.38592130
5	•42299999	•67840159	•92697447	•04100000	1.46870622
•	U-L677777	101070177	# / E O / 1 4 4 1	• 0 - 1 0 0 0 0 0	10-0010045

•43468904

.15993556

.05032538

.01263187

8

12

18

24

.25699999

.10400000

.03000000

.00600000

SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS

•44336016

.13621404

.03684386

.00939677

.91874440

.28723589

.09089939

.01263187

·00599999

			•			
•	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET 2541	SLANT MFP 15.239972	•
	• INC • ENERGY • 500000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 2.400000	•
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•003000	.006440	•001744	.053000	112268	.030406
2	********	••••		.014000	.023617	.006101
3	•001000	•005915	.001454	•072000	136513	•033560
4	**********	•0007127	*****	•027000	.038207	•009393
5	.001000	•001445	•000427	•062000	.134247	.039715
6	•001000	•001445	••••	•038000	.063927	024239
7				•037000	.079668	•039834
8				•034000	.063693	.037154
9	•001000	•001065	•000799	•100000	.213630	•160223
10	•001500	•001003	•000.77	.137000	.261104	•239346
10	•				\$201104	\$2373 40
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				•053000	.202445	.112493
2	.001000	.003820	•003050	.052000	.198625	.114329
3	·			.058000	.184619	.109680
4				•055000	.175070	.114543
5				•036000	.114591	.076102
6				•050000	.159155	108616
7	.001.000	.003183	.001360	•025000	.079577	.066704
8	•001000	•001910	.000826	•058000	.110772	.107923
9	*********	***************************************	************	•049 00 0	.093583	.094637
10	•001000	.001910	.001127	.041000	.078304	.084293
11	•001000	.001910	.001378	•033000	.063025	.094729
12	.001000	.000477	•000694	•064000	.030558	.100918
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT . NO .	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACI.
•006 000	.004424		•006000	.014865	.004424	0,00079
NUMBER .	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•574000	1.126875	•619970	021445	•784753	.001000	•419000
		MEAN ENERGY		MEAN ENERGY		
****		SCAT .TR.NT.		REFL. NT.		
2402.202618		0,06606		0,18680		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. **ENERGY SET** •50000000 2E 614 .86603000 .00001010 SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 4. 5 .12070901 **10775600** .02915251 .05691349 .06978651 .16070694 .07334793 .14894385 .18377037 .06866070 .23090227 •06440259 .07821961 2 .26885682 .15276231 3 .31823603 .06606691 .31597709 .08919287 .13524508 5 .28728840 .07197613 .29228301 .12682183 .11849315 .29817263 .04275594 .14458060 A .05668487 .07726318 .02135675 12 .07306948 .05137331 .01166911 .02703280 .02675412 .00525555 .01461967 .00413047 18 .00812983 .00214711 .00165083 24 0 INCHES 8 6 10 .35127452 .05996604 .07373254 .06937051 .19072249 .09987906 .12305413 .13219964 .31799884 .77004715 .09888837 2 .17367611 .17379837 .35810245 .59774302 3 .07033440 .19018588 .14171074 .37054879 .42543068 .11196563 5 .09310941 •07929309 .18586614 .18618511 .03810948 .05253575 .05316898 .08919802 Я .02781319 .00406264 .00101374 12 .00595479 .02278840 .00370697 .00282725 .00115980 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES Ź 3 5 .00190155 .00657309 .00328396 .01342119 1 2 .00626070 .00591101 .02429280 .01522810 .04328930 3 .03543151 .01058574 .05709314 .02587472 .05321057 .01577490 .05585698 .05218970 .08985771 .05322746 5 .07171320 8 .11726923 .02119644 .02707834 .03696717 .01326092 .02945947 .00961690 12 .04387465 .01532297 18 .01969805 .00155304 .00867169 .00413047 .00625770 .00214711 .00165083 24 9 INCHES 8 7 10 6 .02540033 .02366976 .02667898 .07694570 .46351281 ·05385958 .05659173 .13975313 2 .03528643 44742460 .05229877 3 .04583380 .06666739 .17012985 .33478623 5 .04379998 .05815084 .05101336 .12039624 .14667061 .02350474 .03129842 .05403356 .02330183 .03485930 8 .00595479 .00406264 .00101374 .01591498 .00370697 12 .00115980 18 .00282725 24 TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TOTAL NO. TOTAL FLUX TRANS./NT. REGION BDS. INCHES TRANS./NT. TRANS./NT. TRANS./NT. 2.77126658 1.00000000 1.15469441 1.15469441 2.24442157 2.63286191 2.62983926 .55425332 1 .81399999 1-19564067 2.14546755 .26557972 2.46293164 1.09347710 2 .67999999 .57399999 .97892812 1-67574312 .12701639 2.24994487 3 -96870846 .02886737 1.58214927 5 .42599999 ·71580516 •43462541 .00230939 .88259203 8 .26699999 •44353162 12 .08900000 .14218803 -11887082 .22202799 .02500000 .04429800 -03151334 .06287669 18 .00379794 .00240049 .00379794 .00300000

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	RUN NUMBER 614	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 17.597511	
	INC. ENERGY .500000	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC.DSE/NT 2.771267	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)	i j		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5 .0 800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.002000	.001953	•000529	.05800C	.093320	.025274
2	.001000	•001700	•000439	.019000	•025 247	•006522
3				.060000	.104538	.025699
4				•033 000	.049289	.012117
5				•042 000	.060437	.017879
6				.032000	.051932	•019691
7				.042000	.063855	.031927
8				.036000	•060077	•035045
9				.087000	.165171	.1238.79
10				•170000	.304214	.278863
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN-	DOSE TRAN.	NO. REFL.	NO . REFIL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR.	FACT/STER	FACT/STER
1	.001000	•001910	.000458	.095000	.181436	.087836
2	***************************************	***************************************		.086000	.164247	.091753
3				.061000	.116501	.070415
4	.001000	.001910	•000553	.087000	.166157	.105487
5	.001000	.001910	.000838	.038000	.072574	.075820
6	•••••	***************************************	••••	.045000	.085943	.076767
7				.048000	.091673	.086708
8				.055000	.105042	.109064
9				.019000	.036287	.103541
10				•017000	.032468	.105823
ĩĩ		•		.015000	.028648	.108228
12				.013000	.024828	.080346
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•003000	.000968		•003000	•003653	.000968	
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•579000	.978080	.576896	023561	•7643.79		.418000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		•
2402.205236		000018		0,20346		,

·50000000 •70711000 615 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES .12991452 .04363756 -11750653 .08226001 .06816348 .17684550 .04123255 -23380190 .11035549 1 .12703211 2 .20150344 .06131679 .26294431 .05703407 .15599634 .25908837 .03782891 3 .33138437 .10539058 .12441317 .27204752 •06517162 .21361662 .06537097 -10246164 8 .21613641 ·03865637 .16989856 .05609369 .05885337 .11840550 12 ·02976853 ·04855703 .00515458 .01299442 18 .01340059 .00531330 .00901500 .01527910 24 .00116278 INCHES 7 9 6 R 10 .08308252 .08486153 .07158349 .25086347 ·42070002 1 .11565917 12250467 .13332245 .33789115 .82369012 2 .11022400 .19995680 .15699509 **-30870751** .59311849 .12100303 16251054 ·12353092 .26390374 .35390624 .08190573 •06897335 5 •07901586 •17275057 .12442534 8 .04411078 ·04027966 .02606748 .08368669 .02632686 12 .01634787 .00314955 .00281284 .00923599 .00102224 18 • 00 1 29 2 2 9 •00342107 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 1 2 •01218700 ·00125698 .01916350 .01635021 2 .00968238 .00245242 .04856957 .01380496 .03840505 3 .02346984 .00661756 08987092 .03161372 .03367055 5 .09084172 .01525495 ·09230988 .02835170 .04494241 8 .06545181 .01705551 .07895893 •02802939 .02916388 .03591740 12 .05397146 •01539125 .00366734 ·00687398 .00836792 .00224934 .00317969 18 .00597840 24 .00116278 INCHES 7 8 10 6 •07293582 .01014942 .03885509 .02367128 .49608175 •42388647 2 .04048430 ·04877684 .06567454 ·10961563 .03745085 .07854995 .13915953 •05000619 .28423238 3 .05075225 .03329400 .09847197 .05351715 .11089695 8 .02816573 .01931838 •04740095 .02674870 .02176309 .00100246 .00281284 .00923599 12 .01145949 .00102224 18 .00129229 .00136996 24 TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TOTAL NO. TTL.FLX/NT. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 3.39409710 1.00000000 1.41420712 1 -41420712 2.70260052 2.75584958 .57558231 1 ..77599999 1.26623335 2.79791740 2 .61399999 1.03611055 1.98374164 -23475840 2.34255522 .50299999 .86939337 1.44020594 .09475188 1.97771175 .63418925 5 .35499999 ·79014301 .01555627 1.26129550 8 .20499999 .36205636 • 35913175 .76010987 12 .08100000 .14135443 .10782598 .24744854 .02243761 18 .01661383 .04772136 .01300000

RUN NUMBER

.00100000

INC. ENERGY

COS. THETA

CUTOFF EGY.

ENERGY SET

.00116278

.00116278

*			•			
	RUN NUMBER 615	HISTORIES	ENERGY SET	ANGLE SET ₽ф	SLANT MFP 21.552477	
	INC. ENERGY .500000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 3.394097	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX	DOSE TRAN-	NO. REFL.	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1	•001000	.000873	•000236	•065000	•091864	•024880
2 .	*******	•••••		.018000	.030857	•007971
3				•066000	.083090	.020426
4				.036000	.058167	.014299
5				•045000	.048199	.014259
6				•038000	.058748	.022275
7 8				•042000 •034000	.060006 .050617	.030003 .029527
9				•123000	.177388	•133041
10				.182000	.297481	272691
	NUM	BER OF SCATTE	RED NEUTRONS		·	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	1 ACTOR	1 ACT / STER	THETTOTER	•093000	•177616	•070257
2				.070000	.133690	.060188
3	.001000	.001910	•000451	•090000	.171887	.080241
4				•089000	.169977	.088157
5				•046000	.087853	.074551
6				•049000	.093583	•071404
7 8	•			•058000	.110772	.091436
9				.066000 .021000	•126050 •040107	.112241 .109004
10				•020000	•038197	.080813
11				•019000	.036287	.098054
12				.028000	.053476	.151074
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.001000	.000236		•001000	•000873	•000236	
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT. -649000	REFL. FACT. .956418	REFL. FACT. .569373	REFL. FACT. 027131	FACTOR •728682	FACTOR	FACTOR •350000
		MEAN ENERGY		MEAN ENERGY		
		SCAT .TR.NT.		REFL. NT.		
2402.205236		0,00018		0,20902		

.50000000 616 •34202000 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 .09416251 .01286651 ·Ó9776249 .04836551 .09634201 .09261796 .03876251 ·18054900 .05481653 1 ·12343881 2 -20449632 .04253142 •15655691 ·12946558 .07764736 3 .23611186 •05514595 •17966308 •07021591 •12310031 .18745759 .04081705 .04305913 ·11921486 06780089 8 .17427608 .03266458 .02266820 •12537276 .01677117 •00528985 12 .07690378 •05285105 .01377131 .02776158 18 .00860134 .00107783 .00449244 .00900620 .00154358 24 .00106423 .00202903 INCHES 6 я Q 10 .06368902 •10261550 .07772598 .26908401 •77939201 1 .08438981 .10992446 •18094360 .33215768 .82508034 •11268993 2 .09096772 ·10951980 .24380387 • 42536394 .07316992 •11656017 -13654139 .21288744 .18229410 .06341727 .05845664 .06146228 -10421025 .02704775 8 .02530322 .02698978 .01357691 .02692584 .00524511 .00950954 1.2 .00108589 .00311791 .00214634 .00110705 18 •00274049 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 3 5 .00930456 •01611.710 .03013840 2 .02377519 .01419062 •02626505 .02872427 .04498598 3 .03662096 .00905074 .06471303 .02224164 .05815484 5 .06672161 .01764286 •06787699 .02475544 .04473270 8 .05850472 .01025511 .01281951 •07180519 • 02923670 12 .04084455 .00528985 .02758857 .00730245 .01323586 18 .00860134 .00107783 .00201170 .00100620 24 .00106423 .00154358 •00202903 INCHES 6 9 10 .02225958 .02939751 .10421460 .06461833 .56341473 .03876490 .06414012 .05982393 ·12707802 .32466609 2 .03801489 .07262825 .08596720 ·11348204 .14775765 5 .03342495 .04892140 .07730474 •04504842 •02561195 8 .01254272 .02581174 .00443629 .02265250 .00524511 .00108589 .00500679 •00176064 .00214634 12 .00110705 1.8 •00274049 24 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TRANS./NT. TRANS./NT. TRANS./NT. INCHES TRANS./NT. REGION BDS. 2.92380562 1.00000000 2.92380562 7.01713350 4.47159801 .57799999 2.47879438 1.29557849 2.74743279 .45611369 .82258550 2 .44599999 1.41267785 .07017134 1.66321418 .36699999 .92943142 3 .65740266 .00877143 1.39446153 5 .27099999 .45204106 •49431976 •77294369 8 -15700000 .25330958 .21617194 •46979364 .10536799 .07542409 .19354429 12 -06400000 18 .01200000 .01543755 .01132344 .02591829

RUN NUMBER

24

.00300000

INC. ENERGY

COS. THETA

CUTOFF EGY.

ENERGY SET

.00463684

-00282176

						i
	RUN NUMBER 616	HISTORIES 1000	ENERGY SET 2E	ANGLE SET $ heta \phi$	SLANT MFP 44.558716	
	INC. ENERGY	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 7.017133	
SLAB CONFI	GURATION NEV	ADA TEST SITE	(AREA 7)			
	DE G	ION THICKNESS	FS /CENTIMETE	DC 1		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400	245400	30000	. 40200	1001000	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•001000	•000349	•000095	•054000	•032205	•008722
2	.001000	•000549	•000173	•009000	.004401	•001137
3	•001000	1000011	•000113	•050000	.033437	•008220
4	.001000	•000671	•000165	•029000	•016542	•004067
5	.001000	***************************************	•000103	•042000	.032951	.009748
6				•033000	.021783	.008259
7	*			•039000	.035097	•017548
ė				.041000	.026584	.015507
9				•115000	.092032	.069024
10				•314000	.266568	.244354
••	A11 144	DED OF CCATTE	050 NEUZOONE		\$20030 8	• • • • • • • • • • • • • • • • • • • •
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.001000	.001910	.000181	•096000	.183346	.041264
2 .				•071000	.135600	.034825
3				.087000	.166157	.043134
4				.098000	.187166	.049841
5	.001000	.001910	•000315	.043000	.082124	.037956
6	.001000	•001910	•000331	•054000	.103132	.044493
7				•059000	.112681	.048040
8				•093000	.177616	.082614
9				•019000	.036287	.051307
10				•021000	.040107	.059839
11				•025000°	.047746	.067358
12				•060000	.114591	.177651
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.003000	.000433		•003000	•001692	.000433	200004
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.726000	.561599	.386586	0.38859	•611360		.271000
		MEAN ENERGY		MEAN ENERGY		
	4	SCAT.TR.NT.		REFL. NT.		
2402.205236		0,00612		0,26762		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 617 1.000000000 1.000000000 .00001010 2D

	COCO ELLW OCO /		CLON DDC IN		
	ERED FLUX PER I	NEUIKUN AI KET 2		ENERGY GRPS.	5
INCHES	1 •07446020	•14119731	3 •03351477	•04079749	• 04469099
1	•19000121	•18272318	•06981457	•05773591	•09053715
2	•19668783	•25462788	•09905410	•08150900	•08598365
3	•27985434	•23062803	•08313002	•03417718	•10392738
5	•25165677	•26871681	•05464065	•04890437	•07098557
8	•19120199	•19549026	•04769085	•03857545	•03467599
12	•13301951	•07421777	•03040343	•00434773	•01222566
18	•01948326	02481070	•00452901	***************************************	•00101210
24	•00243381	•00689914	100472701		00101210
24	100243301	, ********		F= .	
INCHES	6	7	8	9	10
	•02013321	•09299350	•04993819	.21078182	•70385449
1	•07327460	•10790559	•10363405	•31029834	•72906195
2	•08799396	•15078369	•11102580	.35198781	•59305789
3	•05540105	•13807292	•09089372	•35848571	•36319838
5.	.04032855	•11084056	•08356005	•23632828	• 22039687
8	.02287819	•03854850	•01720860	•09590035	•05014975
12	•01065348	•03034030	•00502317	•02643587	01461198
18	.00215831	•00102477	•00237728	•00109599	•00226422
24	***************************************	000102411	00027.120	***********	***************************************
- '					
SCATT	ERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	. 4	5
1		•00877613	•01330376	•00933436	•01699543
2	•00404820	•02504469	•00857792	•01313484	•02460417
3	.03121221	•03509525	•03679603	.01239021	•03688453
5	.04509549	.07292370	.02624448	•01134117	•02800759
8	.06630884	•07473693	•02913050	•01357315	•01515533
12	.06146841	•03030533	•01145799		.00637013
18	.01228427	.01382790	•00215729		•00101210
24	•00243381	•00689914		•	
INCHES	6	7	8	9	1.0
1	•01346306	•01878577	•01283186	•06380958	• 30669648
2	•02992405	•04571981	•04489262	•11277725	•30507082
3	•03084679	•04329100	•03051513	14307687	•26032813
5	.01808108	•04745160	•04003004	•10310365	•18108567
8	•01753615	•02568444	•00381977	•05875595	•03598882
12	•00818055	•01262909	•00277212	•01623143	.01360415
18			•00237728	•00109599	•00226422
24					•
		TOTAL 51.11"	*0***	HAC NO FLOW	
THELES	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	3.79999999	1.00000000	REGION BDS. 2.29655636
	1.00000000	1.00000000	3.7999999		
1	•76499999	•96599644		•50200000	2 • 1698657
2	•60899999	•86579437 78643615	2.66055417	• 25200001	2.26471162
3	•49999999	•78643615	2•11375017 1•37076903	•12600000	1.86376874
5	•36499999	•60436449		•03100000	1.41735848
8	•20799999	•34468988	•52510945	•00399999	•73631993
12	•10800000	•16301919	•20735189		•34272099
18	•02400000	•03501906	•03435890		•05875563
24	•00700000	•00933295	•00573042		•00933295

	RUN NUMBER 617	HISTORIES	ENERGY SET 2D	ANGLE SET 2541	SLANT MFP 16.549650	
	. INC. ENERGY 1.000000	COS. THETA 1.000000	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT 3.800000	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)		•	
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•002000	.002412	.000406	.041000	.074460	.012541
Ž	.005000	.006827	•001060	•064000	.141197	.021923
3	*	•		•021000	.033515	•006262
4				•019000	.040797	•009770
5				•026000	.044691	.014113
6				•012000	.020133	.007417
7				.047000	.092993	.044050
8				.027000	.049938	.028912
9				•096000	.210782	.155313
10				•313000	•703854	•629765
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
SECTORS	PACTOR	PACIZATEN	TACITATEN	•044000	.168067	•090552
1 2	.001000	-103820	•ეეი685	044000	183346	.124542
	. •001000	•·/U JUZ.	•05000	.063000	200535	.143365
3 4	•002000	•006366	•001173	•055000	.175070	•126642
5	•001000	.003183	•000624	.054000	.171887	.136327
6	•002000	.006366	•001388	•043000	.136873	119942
7	•002000	3 .000300	***************************************	.046000	.146422	.134119
8				.063000	.120321	.121228
9	.001000	•001910	•000547	.070000	.133690	.161902
10	•001000	•001710	***************************************	•041000	.078304	.109805
11				•047000	.089763	.164600
12				.092000	.043927	.178742
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.007000	.001466	NO TACTOR	.007000	.009239	.001466	0,00007
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.666000	1.412362	•930064	035675	•643168	•004000	•323000
		MEAN ENERGY		MEAN ÉNERGY		
		SCAT .TR.NT.		REFL. NT.		
3803.402618		0,00987		0,53,566		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 1.000000000 .00001010 2D

SCATT	ERED FLUX PER	NEUTOON AT DE	STON ROS. IN	ENERGY GROS.	
INCHES	1	2	3	4	5
11101100	•07544302	•10703352	•05578602	•02786554	• 04420654
1 .	.13218604	•21552871	•09162985	•05427755	• 05464661
2	.17442074	•23314154	•08512559	•05546042	.11552464
3	.20314739	•22357561	•09879046	•06681366	•09973889
5	.26259927	•27163877	•06744295	•03774829	•07514723
8	.21088335	•19052212	•04208259	•02946344	•03976597
12	.11740327	•06944222	•01287384	•00610112	•00835009
18	.02518995	•01023899	•00928786	•00372630	•00033003
24	•00423545	•00145862	•00239027	•00107516	• 00368834
24	***************************************	•00143862	*00237021	•00107318	* 0036634
INCHES	6	7	8	9	10
	•03893952	•06601451	•05131751	•19901254	•63199248
1	•07575323	•11541207	•08401579	•36019916	•82387685
2	•09668033	•11921751	•07952766	•31926102	•57287775
3	•05937536	•11833538	•09222109	•30694577	• 40449474
5	•06150879	•07854514	•07134323	•14922170	• 16898969
8	•02519205	•04964190	•01222623		
12	•02519205	•01978115	•01222623	•07329917	•03161990
18		•00105496		•02593377	• 00939485
	•00107250	•00105496	•00133367	•00435761	•00112627
2.4			•00168322		
SCATTI	ERED FLUX TRAN	C. DED NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2 PER NI - IN	3.	3. INICKNESS	5
1	•		•01292654	•	-
	00707440	•00905104		•01124923	•01827821
2.	•00707668	•01898428	•02060542	•01625911	•02650752
3 5	•01685712	•02070751	•02090392	•01741058	•03009014
	•04841966	•08280663	•02945812	•01333211	•03657030
8 .	•06909961	•06080952	•01898158	•01896020	•01898166
12	•04671007	•03848968	•01058277	•00489628	•00129336
18	.01074293	•00611822	•00247884	•00372630	
24	•00423545	•00145862	•00239027	•00107516	•00368834
INCHES	4	7	8	9	10
	6	7	-		10;
1 2	•02314602 •02222873	•02946944	•01414058 •02799520	•08382177 •12487375	• 37076522
2	•	•04513635	-	_	• 34576745
3	.02985264	•06053410	•03283185	•14117870	.28381493
5	.02824121	•04592368	•03910828	•09747080	• 14383069
8	.02152186	•03616953	•00259756	•04948930	•02835782
12	•00820119	•01822001	•00103777	•02094770	•00783710
18	•00107250	•00105496	•00133367	•00435761	•00112627
24			•00168322		
	TOTAL NO	TOTAL ELLIV	TOTAL DOCE	HINC. NO ELLIP	TTE . CL V VAIT
INCHES	TOTAL NO. Trans./nt.	TOTAL FLUX TRANS./NT.	TOTAL DOSE	UNC.NO.FLUX TRANS./NT.	TTL.FLX/NT. REGION BDS.
INCHES	1.00000000	1.15469441	4.38783875	1.15469441	2.41634180
1		1.09361522	3.70895562	_	
1	•73099999			•52076717	2.52829304
2	•56199999 •700000	•88983744 75035847	2.72058919	•23440296	2.08564017
3	47099999	•75925867	2.10577076	•10507719	1.77851553
5	•35099999	•58594599	1.22345625	•02078449	1.26496957
8	•20399999	•32612335	•48172066	•00115470	•70585142
12	•09400000	•15821595	•19998384		-28657428
18	•02300000	•03201130	•03816713		.05738811
24	•00900000	•01453106	•01417301		•01453106

			,		•	
	RUN NUMBER 618	HISTORIES 1000	ENERGY SET 2D	ANGLE SET	SLANT MFP 19.109788	
	INC. ENERGY 1.000000	COS. THETA .866030	•000010	INC.FLX/NT 1.154694	INC.DSE/NT 4.387839	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA.7)			
	REG	SION THICKNESS	ES (CENTIMETE	RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400			- / / /		
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003000	.004468	.000752	.041000	.065336	.011004
2	.001000	.001069	•000166	.070000	.092694	.014392
3	.002000	.001953	•000365	•026000	.048312	.009027
4	.001000	.000885	•000212	•015000	.024132	.005779
5	.001000	.005123	•001618	•021000	•038284	.012090
6				•019000	.033723	.012424
7				.037000	•057171	.027081
8	•001000	•001700	•000984	•026000	.044442	.025730
9				•110000	•172351	.126995
10				•318000	•547324	. 489711
	` NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•002000	•003820	•000720	.111000	-211994	.122315
2 .	.001000	.001910	.000317	.085000	.162338	.115286
3	.002000	.003820	.000725	.088000	.168067	.102578
4				.095000	.181436	.121591
5	.001000	.001910	.001879	.058000	.110772	.119118
6	.001000	.001910	.000547	.065000	.124141	.146008
7	• • • • • • • • • • • • • • • • • • • •	••••		.067000	.127960	.137594
8	.001000	.001910	•000547	•049000	.093583	.098438
9				.023000	.043927	.155401
10				.018000	.034377	.119537
11	.001000	.001910	•003089	.006000	.011459	.045312
12	• • • • • • • • • • • • • • • • • • • •			.018000	.034377	.119100
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.009000	.004097		•009000	.015197	.004097	0,00070
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.683000	1.123770	.734233	Q36623	•633051		.308000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		•
3803.405236		0,07834		0,53621		
		OED . 23 V	•			

619 1.00000000 •70711000 .00001010 2D SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 4 5 .09125102 .09322150 .05182454 .04176603 .03995050 .18280307 1 .16654373 .08933120 .07999898 .06988869 .22544772 2 .24420555 •10231510 .05329239 .08108806 3 .18210486 .26204477 .09098870 .06223394 .09413348 5 -23045142 .26335247 •09891412 .04558825 .05417017 8 .22960931 .15500123 .03684679 .03374655 +03861892 12 .10990890 .09475381 .00827104 .00737752 .00493051 .04455473 .01278887 18 .00679983 .00334963 .00108103 24 .00137453 .00167340 INCHES 7 8 9 10 .70839449 .04240153 .08170600 .03837202 .24293098 .06416450 .11947058 •09044924 .36356618 •92141799 1 2 .07179027 .10889561 .07814535 ·35051712 .58473055 .05429957 3 .09802285 .06467034 .26773439 .31816092 .06256153 .09585203 .07348925 .21396561 .14681825 8 .01690221 .05335515 .02594868 .05225228 .02087231 12 .00485411 .01407448 •00721724 .03321390 .00265145 18 .00118789 .00467784 .00456701 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS 2 INCHES 1 3 4 .00484418 .00416907 •00680039 .01224277 .00746247 1 2 .00420907 •05109475 .02999879 .01602314 .01713497 3 .01632465 •04060435 •03525919 .03456719 .03721355 5 .03728288 .08011386 .02763627 .01265579 .02880815 8 .07165227 .05634770 •01625432 .01757953 .01653777 .04445720 .05557845 .00827104 12 .00147751 .00322509 18 .01334839 .00429222 -00464058 .00229203 24 .00137453 .00167340 .00108103 INCHES 6 7 8 9 10 .51547727 1 .01023345 .03073424 .02400401 .13698185 2 .02652854 .03901302 .02013332 .15887676 .38621566 .14705871 3 .00966867 .04983725 .02340911 .25826774 5 .00892745 .05773151 .02331671 .12635288 .11684838 8 •01955083 .01072456 •02967802 .04545478 .02087231 .00708548 .02717349 12 .00380758 .00466250 .00109434 .00229702 .00456701 18 24 TOTAL DOSE UNC.NO.FLUX TOTAL NO. TOTAL FLUX TTL.FLX/NT. TRANS./NT. TRANS./NT. INCHES TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 1.41420712 5.37398707 1.41420712 2.77739678 .72599999 1.28610579 4.39770701 .53315608 2.68079023 2 .53499999 •95004544 2.81838237 .20081742 2.10124513 3 .43199999 .72716340 1.90533257 .07495298 1.56934679 5 .31999999 .52957333 1.10006182 .00989945 1.29506256 8 •43375809 ·19400000 **•30465209** •66315345 12 ·08500000 .15683269 .18017988 .28725296 18 ·02400000 .03143725 .03344034 .07792579

RUN NUMBER

.00300000

24

INC.ENERGY

COS. THETA

CUTOFF EGY.

ENERGY SET

.00412896

.00366989

•			7.		· • • •	
	RUN NUMBÉR 619	HISTORIES 1000	ENERGY SET 2D	ANGLE SET ₽¢	SLANT MFP 23.404633	,
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC . DSE /NT	,
	1.000000	•707110	•000010	1.414207	5.373987	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
	RFG	ION THICKNESS	ES (CENTIMETE	:RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400	2.00	7 0 0 0 0 0	. 40200.	1011000	,
	· ŅUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN-	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	_
1	PACTOR	TRANSPACTOR	FACTOR	•048000	•064524	FACTOR
2				•054000		.010867
3	.001000	•000873	•000163	•032000	.065918	.010235
4	•001000	•001388	•000183		•036646	.006847
5	.001000	•001388	•000228	.017000 .021000	.029533	•007072
6	•001000	•000122	•000228	•024000	•028249 •029982	.008921
7				•039000		.011046
8				•021000	.057775 .027133	.027367
9				.105000	.171779	•015709
10				•335000		.126574
10				•333000	•500913	•448185
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.001000	.001919	.000436	.113000	.215814	.097608
2				.072000	.137510	.076694
3	.001000	.001910	•000311	•086000	.164247	.090578
4				.083000	.158518	.077110
5				.065000	.124141	.123881
6	.001000	.001910	•000635	.064000	.122231	.124976
7 .		• •	• • • • • • • • • • • • • • • • • • • •	.071000	.135600	.126755
8			•	.054000	.103132	.077640
9				.022000	.042017	.135272
10				.030000	.057296	.180636
11				.013000	.024828	.059217
12				.023000	.043927	.114629
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•003000	.000724	•	.003000	.002983	.000724	0,00021
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•696000	1.012453	.672823	038143	•618347	•02000	.299000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
3803.405236		0,07100		0,54803		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 620 1.00000000 .34202000 .00001010 2D SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)

SCAT	TERED FLUX PER N	EUTRON AT REG	GION BDS. IN E	NERGY GRPS.	
INCHES	1	2	. 3	4	5
**	•08008354	•1061 8802	•06107703	•04224403	. 05081205
1	•11953501	•14646517	•07681819	•0649441:4	•08710362
2 .	•18983380	•16519642	•06848859	•06859686	•08961227
3	•18866354	•18754038	•07777059	05642708	•06136437
5	•17366659	•21086490	•07203245	•03343914	•04246346
8	•16478467	•13284478	•03083998	.02658260	•02825492
12	•08272817	•05758495	•01677517	•01072181	•00363952
18	•01184044	•00714582		•00223294	•00250527
24	•00478733	•00229738			
INCHES	6	7	8	9	10
	•04803604	•07496052	•05772099	•33773453	•95747850
1	•08087616	•11722288	•07790863	•31502395	80262017
2	•06707940	•08440003	•06683350	•28409059	•49436350
3	•07247079	•10694242	•10010394	•23568909	•25318344
5	•03414727	•06247542	•03269664	•13329059	•09903975
8	•02544585	•04635598	•02018695	•06923013	•02656214
12	•00428497	•01155332	•00367987	•02135299	•00231924
18	•00272101	•00123803		•00453605	. , .
24				•00145918	
	TERED FLUX TRANS		EGY. GRPS. VS		,
INCHES	1	2	3	4,	· 5
1 '	•00157981	•02027394	•00792261	•00684446	•03054163
2	•00569037	•03742679	•02310169	•00777834	•03651279
3	•02371473	•04795149	•04128647	•01612665	•02312208
5	•03645147	•08009487	•03731100	•01743887	• 02397046
8 ·	•07276586	•05730110	•02158389	•00626267	•01765146
12	.04251315	•01955195	•00697493	•00787435	•00253591
18	•00815460	•00496908		•00223294	•00143092
24	•00478733	•00229738	•		
INCHES	6	7	8	9	10
1	•01662112	•04602844	•02265591	•12717077	•58223963
2	•01730382	•04658803	•03465159	•14547254	•39541335
3	•02178373	•04844833	•03957605	•15415557	•21416034
5	•01960528	•04157178	•02764923	•07536132	•08181516
8	•01321396	•02492622	•01492468	•05315834	•01403976
12	. •00235524	•00891521	•00367987	•02035253	•00231924
_		• • • • • • •	•00301901	•00453605	•00231724
18 24	.00123324	•00123803	•	•00145918	
24					
	TOTAL NO	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TOTAL NO. Trans./nt.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
INCHES	1.00000000	2.92380562	11.11046136	2.92380562	4.69112340
,	•54499999	1.25074447	4.09022715	•38886613	2.27738408
1 2	•41399999	•79964402	2.24593271	•04970470	1.62819966
3	•35299999	•63617306	1.50993497	•00584760	1.34600325
5	•2559 999 9	•44126944	•79378594	100704100	• 894 11620
8	•16500000	•29582795	•41306264		•57108800
12	•07300000	•11707237	•14251064		•21464001
18	•01500000	02379486	•02807778		.03221956
24	•00600000	•00854389	•00842041	, ,	.00854389
• •	. ,5555555	100077307	700072071	,	

	RUN NUMBER 620	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 48.387960	
	INC. ENERGY 1.000000	COS. THETA .342020	CUTOFF EGY .000010	INC.FLX/NT 2.923806	INC.DSE/NT 11.110461	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7))		
		ION THICKNESS		ERS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
2002.00		BER OF SCATTE	DED MELITROME	VE ENERGY		
	NOM	BER OF SCALLE	KED NEUTKONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003000	•001515	•000255	.050000	.027390	.004613
2	.002000	.000844	.000131	.057000	.036318	•005639
3				.028000	•020890	.003903
4				020000	.014448	.003460
5				•025000	.017379	.005488
6				•016000	.016429	.006053
7 '				.031000	.025638	.012144
8	001000	222422	000211	•029000	.019742	.011429
9	.001000	•000422	.000311	.137000	.115512	.085114
10				•368000	•327477	•293006
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	· reton	, men Jien	1716176141	-105000	.200535	•047082
2 .	•002000	•003820	•000261	.086000	.164247	.045084
3	.002000	.003820	.000261	.075000	.143239	.035078
4	.001000	•001910	•000594	.074000	.141329	.030893
5	.001000	•001910	.000216	.068000	.129870	.057501
6	*******	******	•••••	•079000	.150879	.068829
7				•065000	.124141	.057224
8				.059000	•112681	.051236
9				.032000	.061115	.098525
10				•037000	.070665	.111906
ii				.028000	.053476	.066822
12				.053000	.101222	.152678
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
			TRAN. FACT.	TRAN. FACT.		
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	+006000	.002781	TRAN. FACT.	TRAN. FACT.
•006000	•000041		•008000	•002/61	•000097	0,00062
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•761000	•621223	•430849	C43778	•561585	.001000	.232000
		MEAN ENERGY		MEAN ENERGY	•	
		SCAT .TR.NT.		REFL. NT.	•	
3803.405236		0,10338		0,57527		,

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 821 2.00000000 1.00000000 .00001010 20

	5; 34932899
•07375029 •10022361 •05382217 •04425579 •0	4932899
1 .09018185 .12191670 .09705878 .08552077 .6	5865316
	06982094
	7250688
5 •29991649 •26347908 •17318528 •15270601 •0	7923530
8 •36289584 •25157596 •13488602 •10730010 •(8496329
12 •21611769 •22461921 •08851772 •06409601 •6	5459308
18 •11683918 •08555569 •02717009 •02568173 •(1819754
24 •00700588 •01272117 •00643935 •00323365	
INCHES 6 7 8 9	10
	40477102
	3162673
	1789190
	3947776
	+1478569
	24485712
	1707542
• • • • • • • • • • • • • • • • • • • •	2898951
- -	00215973
SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS	
INCHES 1 2 3 4	5
	00944742
	1367537
	1316268
	2696083.
	3779998
	2454403
	0485682
24 •00700588 •01272117 •00643935 •00323365	•
INCHES 6 7 8 9	10
	10 23693745
	30966707
• • • • • • • • • • • • • • • • • • • •	28465788
	24080267
	16864460
	9096213
	2191143
••	00215973
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
TOTAL NO. TOTAL CLUW TOTAL DOCE LINE NO SULLY TO	ELV/MT
	FLX/NT.
	95554032
	26075148
* * * * * * * * * * * * * * * * * * * *	0836355
	36826080
	7047149
	73355466
	7093779
	1625230
-	4854214

•						
	RUN NUMBER 621	HISTORIES 1000	ENERGY SET 2C	ANGLE SET 2541	SLANT MFP 6.672268	
	. INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	,
	2.000000	1.000000	•000010	1.000000	4.100000	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7))	•	
	REG	ION THICKNESS	ES (CENTIMETE	ERS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	,
15.2400	15.2400					
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.005000	.007081	.001105	035000	•073750	.011512
2	.007000	•015501	•002231	•045000	.100224	.014422
3	•005000	.006428	•001270	•030000	•053822	.010633
4.	•003000	•003250	•001031	•025000	•044256	.014032
5				.027000	•049329	.021657
6				.010000	•018368	.009856
7	•006000	•007950	•005429	.030000	•0541.71	•036995
8	.003000	•004237	•003514	•033000	•070442	.058416
9	.003000	•003721	•003539	•076000	•160187	.152373
10	•002000	.002130	•002130	•184000	•404771	•404771
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR.	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.004000	.015279	•006402	.046000	.175707	.115345
2	.003000	.011459	.002242	•047000	.179526	.124386
3	.005000	.015915	•006938	•043000°	.136873	.103021
4	•007000	•022282	•016014	.039000	•124141	.085164
5				•039000	•124141	.119571
6	.003000	•009549	•010565	.026000	•082760	.089408
7	•004000	.012732	•011677	.031000	•098676	.089051
. 8	.002000	.003820	• 00256 0	.052000	•099312	.118423
9	.002000	•003820	•001202	.041000	.078304	.110322
10	.003000	.005730	•001847	•040000	•076394	.119057
11		•		.023000	.043927	.088295
12	•001000	•000477	•000406	.068000	•032468	.138854
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.035000	.021249	•001000	•034000	•0,50299	•020249	0.00739
NUMBER .	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.495000	1.029320	.734667	0.23863	.752972	.001000	•469000
		MEAN ENERGY		MEAN ENERGY	•	•
		SCAT .TR .NT .		REFL. NT.		
4104.102618	÷.,	0,43444		0,96418		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 622 2.00000000 .86603000 .00001010 20

	CCATTEDEN	FLIIV	DED	MELITOON	AT DE	GION	BDS.	T AI	ENERGY GRPS.	
	INCHES	1	FER	2	A1 KE	01011	3	114	4	5
	INCHES	.08234	500	.0902	4801	-	5098	ROO.	•03045654	. 03493553
1	-	.13163		•1175			9430		•05877560	•05059162
2		. 15092		•1919			47004		•13669473	.06584535
3		-25662		•1978			7852		•12382800	• 09040582
5		. 28266		•2967			6398		•15589309	•09060175
8		.33536		•2510			2979		•13033225	.12163696
12		. 22867		•1815			7198		•05563745	.04418436
18		.08483		•0459			30839		•01770399	.01463989
24		.00755		•0026			0455		•00306509	.00583730
	INCHES	6		7			8		9	10
		.01853	103	•0683	3203	• (70046	501	•13691753	.42071702
1		.05648	894	•1346	1759	• 1	04183	379	•28559921	•59184853
2		.05025	243	•1732	4406	• 1	39053	381	•27591674	•55828555
3		.04201	386	.1442	25868	• 1	7413	73	•31272957	•52053850
5	•	.07153	3153	•1365	8159	• 1	108486	588	•30766236	•40869942
8	!	.05741	565	•1339	5573	• 1	111688	371	•15318656	.19883500
12		.01134	438	•0370	0215	• (5162	113	•08285515	.08845027
18	}	.00688	3647	•0100	9516	• (2179	868	•03206826	•02925942
24	•			•0112	25847				•00333523	•00764011
	SCATTERED	_	TRAN		IT. IN	EGY		5• \		
_	INCHES	1		2			3		4	5
1				•0014			00294		•01243281	•00265476
2				•0137			09748		•01689507	•00696324
3		•00313	-	•0206			27939		•03435440	•02227939
5		.02275		•0494			04117		•04024285	•02941786
8		.05784		•0725			3575		•05474208	.03761171
12		.06486		•0567			3891		•02724073	•02275653
18		.03851	_	•0119			0920		•01385396	•00113621
24		•00755	>>16	•0026	9314	• (00455	34	•00306509	•00583730
	11151150	,		-					•	• •
	INCHES	6		7			8		9	10
1		•00614		•0181	-		14148		•05903350	•25818808
2		•00701		•0513			33039		•09576835	.30617013
3 5		•01098		•0450			06384		•13253252	•30542018
8		.01820		•0374 •0485)5250()5248)		•14471089 •09138651	•24866903 •15484196
12				•0169					•03738590	
18		•00606 •00235		•0061)20354)15466		•02362743	•07788355 •02247410
24		.0023	,27,	•0112		• (115400	,,,	•00333523	•00764011
27				•••••	. , , , ,				•00333723	, 100704011
	to	TAL NO) .	TOTAL F	LUX	TOT4	AL DOS	SE	UNC.NO.FLUX	TTL.FLX/NT.
•		ANS./	-	TRANS.	·-		NS./N	-	TRANS./NT.	REGION BDS.
		-00000		1.1546			5630		1.15469441	2.11495510
1	_	-90200		1.2134			5349		.83830814	2.46392942
2		.79799		1.1480			594234		•60736926	2.49658643
3		.72399		1.1072			8320		•44109326	2.48199898
5		60099		9166			10997		-23209358	2.25489994
8		43999		•7164			0595		•08775677	1.71102269
12		.23899		•3933			9398		.02424858	.87752931
18		.09300		.1478			3732		•00346409	.29752332
24		-03200		•0459		•	10032	350		.04593985

	RUN NUMBER 622	HISTORIES 1000	ENERGY SET .	ANGLE SET θφ	SLANT MFP . 7.704432	· · · · · · · ·
•	INC. ENERGY 2.000000	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC . DSE /NT 4.734247	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)	•	
•	REG	ION THICKNESS	ES (CENTIMETE	(RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400					
	, NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.007000	.006561	.001024	•044000	.071313	.011132
2	.002000	.002768	•000398	•051000	.078157	.011247
3	.004000	.004091	.000808	•033000	.044157	.008724
4	.001000	•005123	•001624	•022000	.026376	.008363
5	.004000	.005352	.002350	•021000	.030255	.013283
6				•013000	.016048	.008611
7	.007000	.009820	•006707	•036000	.059178	.040414
8				•033000	.060662	.050305
9	.002000	•002768	•002633	•071000	•118575	.112791
10	•005000	•006421	•006421	.201000	•364354	.364354
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•009000	•017189	•005238	•080000	.152788	•077814
2	•003000	.005730	•002748	•076000	.145149	108553
3	.004000	•007639	•004002	•078000	148969	.102435
4	.005000	.009549	.005098	•067000	.127960	.099433
5	.002000	.003820	•004671	•041000	.078304	-097418
6	.004000	.007639	•007988	.045000	.085943	.114891
7	•002000	•003820	•003642	•039000	.074484	.086137
8	.002000	•003820	.005463	•046000	087853	105169
9	.001000	.001910	.003102	.015000	.028648	.124750
10	*******	••••	•••	.016000	.030558	-117949
ii		,		.008000	.015279	•060824
12				•014000	.026738	.106352
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.032000	.021966	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.032000	.042905	.021966	000847
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL'. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.525000	.869076	.629223	025046	•741056	.001000	-442000
		MEAN ENERGY		MEAN ENERGY	3	
		SCAT.TR.NT.		REFL. NT.		
4104.105236		Q52948	,	0,95415		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 623 2.00000000 .70711000 .00001010 2C

SCATTE	ERED FLUX PER.	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	. 1.	· 2	3	4	5
	•08913101	•09752901	•05644901	•08597250	•05655702
1	•11375609	•14720297	•12082911	•12637862	.08901434
2	•14165573	•17470249	•12434313	•09412050	• 06727443
3	• 20558460	•16751245	•10737230	•13105191	•13006900
5	• 26095244	•21530522	•11548635	•12752150	•11010395
8	.24133529	•25431382	•12422819	•10859961	• 07545437
12	•19604259	•14073627	•09422189	•05956542	• 06414108
18	•06635925	•04897564	•03659401	.01154167	.00729045
24	.01617085	.02203851	•00396804	.00892827	.00156262
		,			
INCHES	6	7	8	9	10
	.04831854	•07040251	•06570654	•17537001	.47246804
1	.05553396	.13037441	•10439311	•31147919	.70470915
· 2	.05825478	.17537281	•13991109	•29739137	.67742634
3 .	.07490199	.14727800	•13624729	. 26493450	• 55603436
5	.05721526	.15743374	•07085939	•24063730	. 42365924
8	.02816498	•12477696	•07993739	•15101201	.22333012
12	•02001204	.08583725	.04454286	•06766385	•07668632
18	•00662791	.01863529	•00990148	•02059776	•01340778
24	.00118414	•00232908		•00265721	• 00246533
• •	***************************************	***************************************		***************************************	100240333
SCATT	RED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	•	-	•00727662	•01157290	•01846308
2		•00423659	•01735028	•02518958	•01629458
3	•00384750	•01869841	•02614393	•02156229	•04340619
5	.02851780	.02891214	•04166220	•03297241	•03897826
8	.06141307	•04756567	•05333374	•03822497	•03436561
12 .	•05924994	•06583211	•01905165	•02477453	•04016251
18	.02154223	•02424091	•03118693	•00527841	•00442931
24	•01617085	•02203851	•00396804	•00327841	•00156262
24	************	•02203031	**********	•00072827	*00170202
INCHES	6	7	8	9	10
1	•00100:362	•01946111	•00451775	•04121611	•27366506
2	•01790273	•03152536	•03931194	•09508703	•32964239
3	•02512225	•04771309	•03337592	•10319111	•33166999
5	•03022181	•04364887	•02607998	•11301632	•29186811
8	•00711833	•03853505	•03627961	•07041283	.18221131
12	•00995325	•03966526	•02784768	•03760129	•06487402
18	•00525337	•01628575	•00509595	•01251141	•01236870
24	•00118414	•00232908	•00909399	•00265721	•00246533
24	*00110414	*00232906		*00563151	0.UUZ40>23
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
-14-41-1F-A	1.00000000	1.41420712	6.07021212	1.41420712	2.56981407
1	.85200000	1.33176606	5.53862213	•95458980	2.85826077
2	•74399999	1.22000471	4.86084629	•64346425	2.59391691
3	•64999999	1.08889227	4.09781464	•43416157	2.35514800
5	•52299999	•87386690	2.97254438	•19798899	1.97716339
8	•37899999	•63027110	1.77375355	•06081091	
12	•24299999	•40032590	•88923279	•01131367	1-47196365
18	•08100000	•13819298	•24183593	•0113430 (•86176324
					• 23993126
24	•03100000	•06130405	•07088147		•06130405

,	RUN NUMBER 623	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 9.435971	
	INC. ENERGY 2.000000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 5.798249	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
		ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•005000	•011498	•001795	•043000	•063025	.009838
2	.010000	.016226	•002335	•052000	•068964	•009924
3	•003000	.002983	•000589	•031000	•039916	•007886
4	•005000	•007372	•002338	•038000	•060792	•019275
5	•001000	•001388	•000609	•030000	•039992	.017557
6	•001000	•000873	•000468	•018000	•034167	•018333
7 ·	•002000	•001745	•001192	•036000	.049782	.033598
8				•030000	.046462	.038529
9	•002000	.001745	.001660	.093000	.124006	.117957
10	•002000	•001745	•001745	•213000	•334087	.334087
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
. ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•004000	•007639	•001346	.081000	.154698	.073562
2	.005000	•009549	•004117	•077000	.147059	•085527
3	.005000	•009549	•005040	•067000	•127960	•076406
4	•007000	.013369	•003622	•076000	.145149	•085714
5	•001000	•001910	•000381	•049000	.093583	.102283
6	•002000	•003820	•000937	•055000	.105042	.106827
7				•048000	.091673	.092412
8 9	•.002000	.003820	•001545	•053000	.101222	.091882
*		A 0 5 7 0 0°		•016000	.030558	•090460
10	•003000	•005730	•003643	•026000	•049656	•140551
11	•001000	.001910	.001149	•017000	.032468	.104839
12	•001000	•0.01910	•002533	•019000	•036287	.109553
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.031000	.012731		•031000	•045.5.74	•012731	0.00475
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•584000	.861192	•607385	0,27814	•717102	•002000	.383000
		MEAN ENERGY		MEAN ENERGY		
		SCAT . TR.NT.		REFL. NT.		
4104.105236		Q30636		0,95253		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 624 2.00000000 .34202000 .00001010 2C

	TTERED FLUX PER		•		
INCHES	1	2	3	4	5
	•05426053	•07354152	•08291401	.08418903	
1	•09926516 •19477492	•12079976 •14869963	•09993524 •11805136	•16250102 •18978182	. •09001598 •10387756
2	19909787	•19113060	•17459967	•16883064	• 09088395
5	•19369023	•15558157	13482098	•11557384	
8	•21599103	•21126559	•10310837	•07348763	•05424132
12	•16302784	•08738963	.04896379	•04121100	02627375
18	•02350626	•03127486	•00649027	•00118691	•01522324
24	•00254383	***************************************	•00592995		
INCHES	6	7	8	9	10
	•02561002	•07165349	•06341301	•17930950	•76290853
1	•04233272	•12456773	•11771517	• 34986406	•88984426
2 .	•08337611	•16138661	•16044479	•28165044	•69412416
3	•05895874	•18669102	•13319013	•30039364	•51235719
5	•04500335	•14574478	•08248765	•15357921	.25931246
8	•03298715	•06267317	•06699347	.08835311	.08035284
12	•00590347	•03107027	•01905578	•01862717	•02751323
18	•00329089	•00467240 •00338799	•00277551	•01264680	• 00471561
24		•00336799			•00115561
SCA*	TTERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1		•00790303	.00340332	•02256603	.01838347
2	•00281136	•01106544	•01480094	•03984205	•02915245
3	•01554886	•01789707	•03695809	•04270051	•02826536
5	•03814067	•03481291	•05152565	•04850427	•02919308
8 ·	•05872037	•05658785	•03954976	•03947646	•02451797
12	•05522022	•04503193	•03009812	•02260990	•00801650
18	•01261065	•01284669 ⁻	•00377536	•00118691	•00385328
24	•00254383		•00592995		
14000	,	-	•	•	
INCHES	•00393619	7 •02649220	8 •02647946	9 •11856165	10 •47549814
1 2	•01321703	•03302056	•06555676	•11488123	•47082563
3	•01514163	•05258150	•04570399	•14859575	• 36511197
5	.01580512	•07548519	•03293056	.08562995	•21831863
8	.01707334	•02941766	•03554049	•04166927	•07338860
12	.00244517	•01531907	•01150009	•00802548	•02638401
18		.00193219		•00724684	• 00471561
24		•00338799			.00115561
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BOS.
•	1.00000000	2.92380562	12.54987337	2.92380562	4.31638434
1	•74799999 •5 9 599999	2.00139319 1.36823935	8.27842100 5.35577330	1.29816969	3.39501079
2 3	•50699999	1.02287582	3.69277881	•57306590 •25437111	2.70923330 2.27050454
5	•39199999	•68005072	2.01457193	•04970470	1.40202489
8	•25199999	•41886558	•91465410	•00292383	•99237750
12	•12900000	•22465050	•35776658		•46903596
18	•03400000	•04816752	•07987846		10578274
24	•00800000	•01301739	•01984127	•	.01301739

	RUN NUMBER 624	HISTORIES 1000	ENERGY SET 2C	ANGLE SET θφ	SLANT MFP 19.508417	• .				
	INC. ENERGY 2.000000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 11.987603					
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)							
REGION THICKNESSES (CENTIMETERS)										
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600					
NUMBER OF SCATTERED NEUTRONS VS. ENERGY										
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX	DOSE TRAN. FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL.				
1 .	.002000	.000844	.000132	.029000	.018558	.002897				
2				.048000	.025153	•003619				
3 4	.003000	•002014	•000398	.047000	.028358	.005602				
5				•047000 •030000	.028794 .018137	•009130				
6				•013000	.008759	.007963 .004700				
7	•002000	.001093	•000747	.036000	.024507	.016736				
8	• • • • • • • • • • • • • • • • • • • •	••••		.031000	.021688	.017986				
9				.080000	.061327	.058336				
10	•001000	•000422	•000422	•310000	.260930	.260930				
NUMBER OF SCATTERED NEUTRONS VS. ANGLE										
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.				
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER				
1				.102000	.194805	.043568				
2	•002000	.003820	•000932	.078000	.148969	.042265				
3				•093000	.177616	.055093				
4	.002000	.003820	•000676	.083000	.158518	•043274				
5 6	.001000 .001000	•001910	•000253 •000253	.052000	.099312	.050961				
7	•001000	.001910 .001910	•000293	•056000 •049000	•106952 •093583	•055964 •047337				
8	.001000	•001910	•000253	•053000	•101222	.053559				
9		•••••		•022000	.042017	.077359				
10				.029000	.055386	.096490				
11		•		•017000	.032468	.054290				
12				•037000	.070665	•120671				
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.				
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.				
.008000	.001698		•008000	•004373	.001698	0,00148				
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF				
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR				
.671000	.496213	.387899	036101	.637500		.321000				
		MEAN ENERGY		MEAN ENERGY						
		SCAT . TR.NT .	•	REFL. NT.						
4104.105236		037071		1,07602						

INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET RUN NUMBER 3.00000000 1.00000000 .00001010 625 28 SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 2 3 .08854069 .03757603 .02582508 .05942460 .04050036 ·12710096 .07899894 1 .08937991 .07918380 .06238695 .13589935 2 .10420844 .11434396 .06740537 .09614960 .11445849 ·11004125 3 .20005901 .17759423 .11147684 5 .27185074 .23703053 .14926464 .07529149 •10263857 .25843938 .14972699 .12653453 .11167887 .10951097 A 12 .19535455 .18057210 .10154247 .07853339 .06730323 18 .12160629 .11812933 .04682080 .06235458 .03495404 .02923137 .00906920 .00691831 24 .03499587 .00312926 INCHES Q 10 .08881409 •07637129 .04817870 .20367541 .19720070 .13573813 .07775296 .20013505 .33434801 1 .10828303 2 .15237591 .11022370 .09363231 .21801587 .36890893 .18764192 .12517989 -10953834 .22936263 .38233730 3 .16135470 .12678060 .13021723 .23623957 .28394258 8 .16782123 .12117528 .12318589 .18607278 .23022896 .09072068 .17004559 12 .17392070 .12751337 .13210631 .09631222 .02158694 .05440483 .03223683 .05939630 18 .01243969 .00647740 •01478791 .01400423 .01834136 24 THICKNESS SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. INCHES 2 5 3 .00232896 .00654944 .00129275 .00102323 .02446085 .00659927 .00939420 2 .00450330 .01516248 3 .00276477 .00994789 .01358108 .02857129 5 .02690978 .02307212 .04122911 .02093244 .01825934 8 .03230988 .03167782 .03566595 .01436645 .03180121 .03792858 12 .03991103 .03451907 .02871705 .02619345 18 .04297178 .04404059 .01641992 .02608904 .01330300 24 .03499587 .02923137 .00906920 .00312926 .00691831 INCHES 6 ŀΰ .01815066 .01547249 .00589992 .12772547 .02048012 .19535964 .03180569 .01512756 .03151776 2 .03336307 .04887592 .23534429 3 .03362722 .05065389 .02094892 5 .05464384 ·06262239 .04655796 .07444199 .20722260 A .06187246 .05083671 .05892166 .07847276 .17764866 .05932837 .05368521 .04426090 .07203726 .12937701 12 .03195873 .00987043 .03787521 .02497230 .04001803 18 .01478791 .01400423 24 .01243969 .00647740 .01834136 TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TOTAL NO. TOTAL FLUX REGION BDS. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. 1.00000000 1.00000000 4.78461538 1.0000000 1.81761882 .82099999 .93100000 4.77253684 1.01992305 2.11430774 .67299999 2 .86999999 1.02513133 4.62281389 2.13416345 .81699999 1.01147777 4.43916261 .55200000 2.29968990 .70199999 .94689157 3.82212544 •37100001 5 2.14561066 8 .56399999 •77857358 2.95751267 .20500000 1.78937490 12 .40699999 .61795794 2.12258352 .09199999 1.40961241

.85372723

.37628142

.31551902

.15739460

.21500000

.10600000

18

24

.02799999

.00800001

.67580217

•			•			•
	RUN NUMBER 625	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 4.754596	,
	.INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC . DSE /NT	,
	3.000000	1.000000	.000010	1.000000	4.600000	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
	DF 6	ION THICKNESS	ES (CENTIMETE	:DC1		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400	2.5400	3.0800	7.6200	1041600	,
	NIII	BER OF SCATTE	DED NEUTDONS	VC. ENERGY		
	NOP	DER OF SCALLE	KED NEUTKONS	V3. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.023000	•037528	•005221	•032000	•059425	•008268
2 .	.019000	.028700	•003681	.047000	.088541	.011356
3	.006000	•009134	•001608	•022000	.037576	.006617
4	.001000	•005915	•001672	.018000	•025825	•007298
5	.005000	.006913	•003006	.021000	.040500	.017609
6	.010000	.012551	•008458	.044000	.088814	.059853
7	.004000	.006557	.005559	.038000	.076371	.064750
8	.009000	.016689	.014875	.024000	.048179	.042942
9	.009000	.013744	-012549	•113000	.203675	.185964
10	.012000	.019383	.018540	.086000	.197201	.188627
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REPL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.005000	•019099	•007955	•040000	.152788	.108899
2	.015000	•057296	•027787	.029000	.110772	.062638
3	.014000	•044563	•028593	•040000	.127324	.091985
4	.007000	•022282	•009296	.038000	.120957	.088965
5	.008000	•025465	•019503	•033000	•105042	.091735
6	.009000	•C28648	•020708	.037000	.117774	.110290
7	.006000	.019098	.012417	.036000	.114591	.111074
8	.013000	•024828	•021617	.044000	.084034	.092915
9	.008000	•015279	•009322	•039000	.074484	.085632
10	.004000	.007639	.007491	•036000	.068755	•117660
11	.005000	• 009549	•007310	.028000	.053476	.076851
12	.004000	•001910	•006410	•045000	·C21486	.094457
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.106000	.083169	•008000	.098000	.157113	.075169	0,02810
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.445000	.866107	•593284	020661	.757281	, actor	•449000
		MEAN ENERGY		MEAN ENERGY	•	
		SCAT.TR.NT.		REFL. NT.		
4604.402618		0.86021		139289		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 626 3.00000000 .86603000 .00001010 28

sca	ATTERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
• • • • • • • • • • • • • • • • • • • •	.05702452	•05247251	•03336001	•03003150	.05265952
1	.13894164	.12564393	.07703584	•04923008	.06337635
2	•17060802	.12825589	•09951464	•09270582	• 09301406
3	.21342456	•18370185	•11916814	•08844344	• 09077674
5	.29012872	•19937437	•14600337	•12260361	•14404194
8	.25130237	•20019427	•12053424	•09088421	•14700769
12	.17484109	•16328036	•09512350	•11321738	•10326147
18	.18726989	•08916963	•04365508	•02837970	•02989541
24	•01772720	•01265322	•00390068	•00549991	•00859925
INCHES	6	7	8	9	10
	•11329450	•06386348	•06203447	•22565253	•19991799
1	•13277566	•07311826	•10431106	•26496449	• 30677361
2	.22057920	•08194748	•12254348	•28654638	•37566176
3	•23538674		•13290001	•27700488	• 36380476
5	.29414178		•13950444	•24487998	•31754236
8	•22435607	•15326150	•15158290·	.20811817	• 27197042
12	•18609860	•09952986	•10699865	•15793944	•13728657
18	•06551974		•04532254	•03678915	•05247169
24	•00942084	•02866185	•00559981	•01176292	•01829648
	ATTERED FLUX TRA		EGY. GRPS. V		
INCHES	1	2	3	4	5
1		•		•00656610	•01040732
2	•00155646		•00209917	•00455332	•01991246
3	•00492164		•01139250	•00826548	•01906399
5	•02166429	•	•02730613	•00887408	•05199271
8	•03010934		•03424519	•01790344	• 04653626
12	•02876878		•03042253	•02209657	•02370932
18	•04380561	-	•01576680	•01475098	•00967357
24	•01772720	•01265322	•00390068	•00549991	•00859925
INCHES	6	7	8	9	10
1	•01090293	•00735637	•01290059	•03024812	.12793375
2	•03977426	•02488239	•02720299	•06381353	•20105550
3	•05314193	•04443739	•04327316	•08191912	. 24444454
5	•09210079	•05372047	•05738091	•08191357	•22590177
8	•07478979	•05719232	•06683998	•08715035	•200610↔0
12	•06171668	•04843085	•04216710	•08760763	•11367479
18	•02325726	•02080589	•02107954	•02734148	•04328302
24	+00942084	•02866185	•00559981	•01176292	•01829648
			mama		
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000		5.52476864	1.15469441	2.02525666
1	•90600000		5.28044937	•91913676	2.25530766
2	.83599999		5.10796965	•73092156	2.40229830
3	.78199999		4.88373296	.58081128	2.41749069
5	•67699999		4.09058576	•36719282	2.42133268
8	•53999999		3.12850642	•18475111	2.00396294
12	• 35699999	•56891989	1.96669341	•07390044	1.41147737
18	•17600000		•74585149	•01847510	•63348400
24	•07100000	•12674093	+36874825	•00461877	•12674093

	RUN NUMBER	HISTÓRIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 5.490106	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC . DSE/NT	
	3.000000	.866030	.000010	1.154694	5.311594	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7))		
•		ION THICKNESS				
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
13,2400	13.2400					
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.011000	.014358	.001998		.049385	.006871
2	.008000	.009811	•001258	•031000	.045443	.005829
3	•003000	.003022	•000532	•023000	.028891	.005087
4	•002000	•006822°	•001928	•022000	.026008	.007350
5	•005000	.009844	•004280	.026000	.045605	•019828
6	•006000	.010282	•006929	•055000	.098116	•066122
7	•011000	•025626	•021726	•036000	.055308	•0,46891
8	•∩0 <u>3</u> 000	•005099	•004545	.039000	.053724	•047884
9	• 07000	•012796	•011684	•117000	.195422	.178429
10	•011000	•015357	•014689	•094000	.173135	.165607
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1.	•008000	.015279	.005924	.076000	.145149	.081143
2 '	.008000	.015279	•007259	.058000	.110772	.084059
3	.013000	.024828	•015059	.071000	.135600	.094757
4	.008000	.015279	•010285	•069000	.131780	.091642
5	•002000	.003820	•005645	•051000	.097403	.115394
6	•005000	•009549	.012730	.037000	.070665	.089285
7	•009000	•017189	.•012956	•029000	.055386	.073415
8 .	•007000	.013369	.015581	•043000	.082124	•097979
9 ·	•003000	.005730	•021481	.012000	.022918	.088667
10				.009000	.017189	.071546
11	.001000	•001910	.008295	.009000	.017189	.056637
12	•003000	•005730	•017653	.013000	.024828	.105703
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.071000	.073569	•004000	•067000	.113017	.069569	0.02424
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
477000	.771036	•549898	022922	.742527	.001000	.451000
		MEAN ENERGY		MEAN ENERGY		
		SCAT .TR.NT.		REFL. NT.		•
4604.405236		1,08539		1,44166		

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 3.00000000 .70711000 .00001010 28

SCATTE	DED ELLIV DED	NEUTRON AT RE	TON BOS. IN	ENERGY GROS.	
INCHES	I I	2	3	4	5
INCHES	•06596152	•09445101	•04439155	•03876050	•04430201
1	•10991422	•10369363	•10138131	•07636803	•10426086
ž	.17438208	.17804746	•08094019	•08086170	.08963252
3	•20627021	•20625409	•10330607	.08384466	.10673558
5	•27366053	•21872184	•18965045	•11019256	.14297031
8	-29164879	•18311192	•10773371	•08792711	.14438381
12	.18625735	•19697301	•09717327	.09256421	.12346298
18	.10368887	•09762205	.05474483	•03476614	•02902624
24	.01385934	.02320336	•00336016	•00360169	.00709532
INCHES	6	7	8	9	10
	•09252301	•11785396	•06341301	•24039846	•22939101
1	.12274437	•16861071	•12269183	.26249227	•39867902
2.	•15526952	•21352555	•14666609	•30667457	•43596157
3 .	•21965 8 28	•15966509	•15639899	•27383788	•36333385
5	•24056983	•19719903	13932090	• 22942907	•35398219
8	•22343172	•11263751	•10692814	•20090081	•18737822
12	•12251079	•06786612	•06212310	•14722734	•10265654
18	•04111972	•03064894	•03883648	•03302677	•02820375
24	•00737746	•00333851	•00542583	•00543315	•00728146
	RED FLUX TRAN		EGY. GRPS. V		
INCHES	1	2	3	4	5
1		•00516374	•00815419	•00257124	•01568841
2	•00597767	•01629436	•00134450	•00836695	•01434918
3	•00656797	•01938759	•01003466	•01457023	•02048825
5	.02841686	•03253364	•03033631	•01803650	•03691006
8	•05465726	•03892946	•02254280	•02893701	•05721375
12	•03909146	•04669694	•02213778	•03073474	•04048879
18	•02410660	•02828338	•02332747	•01399629	•01134148
24	•01385734	•02320336	•00336016	•00360169	•00709532
INCHES	4	7	8	9	· 10
• • • • • • • • • • • • • • • • • • • •	6 •00943663	•04872336	•02209958	•02?58180	•21206745
1 2	•03896440	•05909545	•03278326	•08537843	•26760675
3	•05940464	•05745017	•04926002	•10225559	•23574004
5	•07845068	•08609360	•07033805	•10470215	•25482499
8	•08799342	•05956695	•05390945	•09242993	•14442075
12	•05634250	•03531979	•03033448	•08316928	•07721276
18	•02054485	•02073160	•02183951	•02288368	02400469
24	•00737746	•00333851	•00542583	•00543315	•00728146
• '	•••••	***************************************			
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.41420712	6.76643716	1.41420712	2.38882617
1	•91000000	1.42062697	6.58859145	1.06914060	2.63997686
2	.82199999	1.33767322	6.03907452	.80751227	2.66947353
3	•74799999	1.18468243	5.16983513	•60952328	2.48882796
5	•63099999	1.08853779	4.37433227	• 34789495	2.44359166
8	•48499999	•79050675	2.76148797	•14990596	1.79598770
12	•31199999	•50961156	1.58171562	•04808305	1.24689776
18	•14000000	•21954479	•58146139	•00848523	•50016905
24	•05600000	•08139049	•16586146	•00141422	•08139049

•	RUN NUMBER 627	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 6.723984	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	, ,
	3.000000	•707110	•000010	1.414207	6.505353	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7)			
	REG	ION THICKNESS	ES (CENTIMETE	ERS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	,
15.2400	15.2400			•		
	, NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.010000	.010185	•001417	•034000	•046642	.006489
2 .	.014000	•017136	•002198	.048000	.066787	•008566
3	.002000	•002260	•000398	•023000	.031390	•005527
4	.002000	•002110	•000596	•029000	.027408	•007746
5	.003000	•006958	.003025	.028000	.031326	.013620
6	.006000	•005450	•003673	.046000	.065424	.044090
7	.003000	.002467	•002092	•055000	.083336	.070654
8	.005000	.003912	•003487	.031000	.044840	.039966
9	.004000	•004370	•003990	•112000	•169988	.155207
10	.006000	•005085	•004864	•112000	•162205	•155152
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.016000	.030558	.010985	.091000	.173797	.077121
2	.006000	.011459	•002290	.057000	.108862	.055769
3	.011000	.021008	•012941	.066000	.126050	.077021
4	•005000	•009549	•005467	•070000	.133690	.082259
5	.003000	.005730	.003941	.038000	.072574	.074451
6	.006000	.011459	.004961	.043000	.082124	.083231
7	.003000	•005730	•001584	•050000	.095493	.092041
8	.003000	.005730	•002495	.042000	.080214	069023
9	.001000	.001910	•001025	.017000	.032468	.089293
10	.001000	.001910	•003473	.015000	.028648	.087139
11				.014000	.026738	.096204
12			•	•015000	•028648	.084778
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN&FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.056000	.026741	•001000	•055000	•059934	•025741	.001457
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.518000	•729346	.507018	Q24343	•740993	•001000	•425000
		MEAN ENERGY		MEAN ENERGY		
		SCAT .TR.NT.		REFL. NT.		
4604.405236		.0.79477		,140981		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 628 3.00000000 .34202000 .00001010 28

	SCATTER	ED FLUX	PER	NEUTRON	ΑT	RE	GION	BDS.	. IN	ENERGY GRPS.	
	INCHES	1		2	• • •			3	• • • •	4	5
		•07345	5652	•0893	311	52	• ò	7113	3100	•04621152	•07479501
1		.11961	1969	•1162	239	98	•0	8038	3184	•08108712	•10751313
2		•10534	4284	•120	723	02	•0	8220	376	•10684745	•11846431
3		.19124		•1293	322	76	•1	2376	5811	•10235380	•12763508
5		•22737	7806	•2602	278:	32	•1	3407	7511	•10595336	•11898739
8		.21122	2503	•1684	74	75	•1	1644	4492	•07597547	•07710121
12		•14808	3183	•1549	900	19	•0	8676	5691	•03906487	• 05355246
18		•08754		•0548	349	48	•0	1811	1509	•01122904	•01424460
24		•00673	3442	•0084	108	83				•00234595	•00401085
				_				_		_	
	INCHES	1200		7		٠,		8		9	10
		.12082		•1069					5749		•45172550
1 2		.17576		•140					271		•62731670
3		•21686 •24017		•1717 •1872					5012 2463		•52984917
5		•21486	-	•138			_	5009		•24850464	•51884680 •28119619
8		•16277	-	•0767					416		•14299447
12		.09848		•039	_			-	3723	• • •	•04402976
18		•04680		•024					1563		•01392533
24		•01080		•001			•0	000.	כסכו	•00339719	•00560746
24		•01000	,,,,	•001		33				000337117	•00360146
	SCATTER	ED FLUX	TRA	NS. PER A	IT.	IN	EGY.	GRF	95•	VS. THICKNESS	
	INCHES	1		2				3		4	5
1				•0013	80	91	•0	0432	2336	•00587456	•00246371
2		•00593	3425	•0126	57	94	•0	0575	707	•01149668	•01907250
3		•00747	7566	•0215	12	57	•0	1218	3997	•02970869	•03125303
5		•04030	732	•0269	65	26	•0	4033	911	•02986593	•02841450
8	•	•04952	2624	•0440	88	36	•0	3316	5210	•04037352	•03437861
12		•04282	2840	•0579	179	52	•0	2313	3188	•01661232	•01853154
18		.03124		•0320	777	5.5	•0	0492	2459		•00193839
24		•00673	3442	•0084	180	83				•00234595	•00401085
				_				_		_	•
	INCHES	6		7			_	8		9	. 10
1		.03610	-	•034			-		2016		• 36314559
2		•0578	_	•0474	_			_	979		• 37886968
3		•06999		•0661			_		7207		•40714321
5 8		•10331		•0544	_			7227		•16100061	• 24506826
12		•06112 •04966		•0354 •0190				5410	1942	•09296287 •04540603	•12693089 •04251196
18		•01766		•0138				0630		•00928411	•01392533
24		•01080	_	•0013			•0	0630	,402	•00339719	• 00560746
27		•01080	,,,,	*****		99				***************************************	***************************************
		TOTAL NO	٥.	TOTAL F	LU	K	TOTA	L DO	SE	UNC.NO.FLUX	TTL.FLX/NT.
		TRANS./		TRANS.			TRAN			TRANS./NT.	REGION BDS.
		1.00000		2.9238			13.9	8928	3537	2.92380562	4.18813147
1		.79999	9999	2.181	86	46	10.2	2515	478	1.63733117	3.53704021
2		•67399		1.650	_	_		4070		•91807499	2.87649054
3		•59799	-	1.3723		-		-	580		2.53633594
5		•48799		•962				2041		•16080931	2.04038675
8		•34899		•5993					3969		1.28310259
12		.21999		•3697					082		.81966158
18		•08900		•139		-	_	9324			• 28895042
24	•	•02800	0000	•042	13	76	•0	9964	067		•04251326

•	RUN NUMBER 628	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 13.901514	
	INC. ENERGY 3.000000	COS. THETA .342020	CUTOFF EGY .000010	INC.FLX/NT 2.923806	INC.DSE/NT 13.449506	
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (AREA	7)		
	REG	ION THICKNESS	ES (CENTIMETE	RS 1		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400		•	•		
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR.	FACTOR	FACTOR	FACTOR
1	.004000	.003144	•000437	•040000	.025124	•003495
2.	•006000	•002709	•000347	.038000	•030546	.003918
3				.036000	.024328	.004284
4	•002000	•000771	•000218	.026000	•015805	.004467
5	•003000	.001370	•000596	•042000	•025581	.011122
6	.007000	•003556	•002397	•0 650 00	•041325	•027849
7	•001000	•000422	•000358	.043000	•036575	.031009
8				•044000	•030873	•027517
9	.002000	.001093	•000998	•095000	•071499	•065282
10	•003000	•002867	•002742	.187000	.154499	.147782
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•008000	.015279	•001939	•091000	•173797	.038276
2 .	.004000	.007639	.001002	.066000	.126050	.032973
3	•002000	.003820	•000771	.062000	.118411	.030802
4	•006000	.)11459	•003028	.066000	.126050	.039453
5	.002000	.003820	.001421	.059000	.112681	.052957
6	•001000	•001910	•000164	.054000	.103132	.050622
7	•002000	.003820	.002034	.058000	.110772	.055410
8	•001000	.001910	.000864	.071000	.135600	.065788
9		***************************************		.020000	.038197	.057267
10	•001000	•001910	•000538	.022000	.042017	.058359
11	•001000	•001910	.003696	.021000	.040107	.063357
12	***************************************	***************************************		.026000	.049656	.078736
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.028000	.008094		.028000	.015933	•008094	0,00684
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.616000	.456156	•326726	0,31047	.682678	•002000	•354000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
4604.405236		0.73338		1,51201		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 5.000000000 1.000000000 .00001010 2A

CCATTE	RED FLUX P	ED N	ELITRON	ΑT	DEG	ION	RDS	_ TN	L FNFR	esv. e	SPPS.		
INCHES	RED PLOX P	EK 14	2	^ '	KEO.	LOIY	3	• 11	- CHER	4	INF JE		5
Inches	054235	01	•0349	809	1	• 0	1164	1278		-	24549	• 0	4859678
1	•102683	-	•0733		_		1424				3606	• 0	7565736
ž	.115014	-	.088	7885	4)443			0428	34844	• 0	7416051
3	.146791	93	.150			• (663	7641		0871	2321	• 0	8408637
5	.188971	93	•1536	5739	6	• (905	4731		0753	34499	• 0	8449533
8	.161986	50	.2158	3477	9	• 0	984	7687	, ,	0969	1073	• 10	0417634
12 "	•203057	23	•190	1066	7	• (846	5894	•	0599	98015		5513123
24	•111510		•0594				164			.0213	34821		3117142
36	• 005969	84	• 0046	5545	8	• (057	3709	,			• 0	0122390
INCHES	6		7				8			9			10
INCHES	.057151	19	•101	7811	0	• 1	1033	3220) 4		2292		3240049
1	.088349		•137				673				00225		7897857
2	.087930		•1879				1613			223	26098	• 3	2427611
3	.085030		•1874				967	4838	3	1749	90740	• 3	2770542
5	.152239		•225	4056	6	• 2	2341	1492	2 (1750	05473	• 3	6039892
8	.185287		•1714	4024	8	• :	1735	9665	5 6	134	10486	• 2	6370128
12	45ر 184		•131			• 3	2048	2450	,	1142	25952	• 1	9413285
24	.066912		•057	7756	1	• (0633	5826	5 (016	19142	• 0	3331402
36	•004236	34	•001	3134	0	• (0061	4332	2 (0049	91671	• 0	0747391
SCATTE	RED FLUX T	DANS	PER I	NT.	T NI.	FGY.	- GR	PS.	VS. 1	THIC	KNESS		
INCHES	1	KANG	2	• • •	• 14		3		• • •	4			5
1	•					•	0014	0368	в ,	.004	74156	• 0	0521706
ž						•	0012	8962	2 (001	24112	•0	0563415
3			• 00 2	4961	9	•	0043	581	8	•006	76250	• 0	0441751
5	.011816	19	•008	0692	0	•	0152	703	2 .	.023	84617	• 0	0625105
8	.015717		•032			•	0185	140	6	•009	45600	• 0	1885156
12 .	•041508	114	•037	8467	0	•1	0285	391	7.	.014	27386		1602000
24	.027217	154	•025	3496	9	•	0071	631	4 ,	• 005	69093		1130179
36	•005969	84	•004	6545	8	•	0057	3709	9			• 0	0122390
11151155	4		7				8			9			10
INCHES	•010370	112	•017		. 2	_	0093	352	5		64588	•0	9836637
1 2	•023491		•039		_		0332		_		68295		5300016
3	•017867		•055	_			0597		-		50558		0555863
5	•027893		•072				0692	-	_		00042		2190721
8	.052349		•081				0755			.083	60542	• 1	2128807
12	.046143	_	•039				0871			.061	91563	• 1	4556197
24	.012417		•030			•	0355	790	6	• 01.0	62581	• 0	2832756
36	•004236		•001			٠	0061	433	2	• 004	91671	• 0	0747391
	TOTAL NO.		TOTAL	EL 1115	,	TOT	AL D	OSE	1 FAI	C . NO	•FLUX	TT 1 -	FLX/NT.
INCHES	TOTAL NO		TRANS.				NS./			ANS.			ON BDS.
INCHES	1.000000		1.000				7692			-	00000		3478966
1	•945000		1.017				7250				99999		4803911
2	.886000		1.031				6775		-		00000		6386985
3	.832999		1.020		_		5207				00001		0928566
5	.740999		956				8418			•431	00001	2 • 1	17124748
8	59399		.839			3∙	9200	830	3	. 260	00000	1.8	6549130
12	.44699		•650	829	33	2.	7101	888	5	.132	00000	1.5	55366844
24	.136000	000	•211	5432	23		7046				00000	-	9451367
36	.03200	000	•043	669	10	•	1380	132	2	•002	00000	• 0	0436691.C

			•		•	
·	RUN NUMBER	HISTORIES	ENERGY SET	ÄNGLE SET 254 1	SLANT MFP 6.062776	
	INC. ENERGY 5.000000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC . DSE/NT 5.800000	
SLAB CONFI	GURATION NEVA	NDA TEST SITE S	OIL (AREA 7)			
	DEC	ION THICKNESS	ES (CENTIMETE	DC 1		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
30.4800	30.4800	2.5400	3.0800	7 46200	10.1600	•
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.004000	.005908	•000652	.025000	.054235	.005984
2	.003000	.004807	•000489	.020000	.034981	.003558
3	.003000	.008382	•001171	.012000	.016413	.002292
4				.014000	•033245	.007452
5	•001000	.001187	•000409	.021000	.048597	.016757
6	.003000	•004229	•002260	.029000	.057151	.030546
7	.001000	•001347	•060929	.058000	.101781	•07.0194
8	•005000	•006158	•004566	•052000	•103332	•076608
9	.004000	•004831	•003915	•059000	.105023	.085105
10	.006000	•007366	•006985	•097000	.232400	.220380
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR ¹	FACT/STER	FACT/STER
1	•003000	•011459	.010183	.027000	.103132	.055494
2	.001000	•003820	•003015	.027000	.103132	.065245
3	•008001	•025465	.016187	•041000	.130507	.095219
4	.003000	•009549	•006383	•033000	.105042	.084978
5	•003000	•009549	•010321	.031000	•098676	.075941
6	•003000	•009549	•004030	•028000	.089127	.085157
7	•001000	•003183	•002458	•028000	•089127	• 08 9 4 5 7
8	•002000	•003820	•001968	•043000	.082124	•085070
9	•005000	•009549	•007054	•029000	•055386	•062810
10				•026000	•049656	•073240
11		•		•027000	•051566	•088957
12	•001000	•000477	•000394	•047000	.022441	•090520
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRANG FACT
.032000	.023376	•002000	•030000	•044217	.021376	0,01167
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•387000	.787159	.518877	017474	.811577	.102000	.479000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.502618		1,94562		2,25766		

RUN NUMBER CUTOFF EGY. INC.ENERGY COS. THETA **ENERGY SET** .86603000 .00001010 2A 630 5.00000000 SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 4 2 3 1 .05622602 .06161146 .03036104 .03342553 .05231152 .11876918 .09584648 .04307470 .06448653 •09247772 .06588735 .08796276 .12914688 .08741237 -10212853 2 .08123881 .11903924 3 .18026424 .14263890 .08761291 .11849857 5 .19756340 .18481558 .08517413 .09710633 .19348729 .14300678 .10188989 .09236325 .26032715 R .08519483 .06817171 .07336888 .17680795 .18483869 12 .07870142 •02569202 .00920326 .01567607 .03045769 24 .00576612 .01404170 .00656132 36 7 8 10 INCHES 6 .09977803 .04859903 .12497398 .08009200 .19910451 -15891587 .14324021 1 .06868737 .16372541 .37721064 •14501645 •41531744 2 .11336825 .20310963 .25842171 .30597402 .21260965 .39053270 .12387562 .20135085 3 .22903978 .28578865 .19112365 .36480874 5 .13926938 .23536412 .31226663 .15414377 .28332485 8 .18449921 .13480155 ·13378910 .16369271 .10418270 .18372530 12 .04854642 24 .04530647 .04471125 .01892330 .05345385 .00124900 .00451795 .00685469 .00565809 .00361913 36 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES .00232689 .01148057 1 .00145041 .00705893 .00581979 .01051568 2 .00388030 .00706584 .02444358 3 .00147439 .01461255 .02034126 5 .00371887 .02049574 .01281886 .02565689 .02189568 .01929034 .01514213 .02462044 .03768196 8 .02574917 .01534633 .02406580 12 .03498771 .04686278 .01441194 .00849727 .00362698 .00829088 .01181858 24 .00576612 -01404170 .00656132 36 INCHES B 10 .03718550 .15943941 .00504645 .01785332 .02746938 1 .01872088 .03196074 .05046015 .04541543 .24319094 2 .03551983 .07106608 .08193072 .25349716 3 .02687375 .11752735 .07201068 .27012147 .02719288 .05706270 5 .12535665 .07652301 .21835244 8 .05303747 .08408469 •09316530 .06398684 .14446133 12 .04422249 .05006640 .01255787 .02323837 .02536189 -02050405 .04142708 24 36 .00361913 .00124900 .00451795 .00685469 .00565809 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. INCHES TRANS./NT. TRANS./NT. REGION BDS. TRANS./NT. TRANS./NT. 1.00000000 1.15469441 6.66169852 1.15469441 1.91999378 .94600000 1.21226971 6.80210524 .95146819 2.27790230 6.55981760 .78288281 2.39065421 2 .87899999 1.19747577 6.17722427 .64431947 2.48945642 3 .83699999 1.16468369 .43647449 5 .72899999 1.06342120 5.34556588 2.32966270 .59299999 4.18970372 .24364053 .91962532 2.20431346 8 .42599999 .65491951 2.67707056 .11200535 1.42057879 12

•67485105

.12377973

.01039224

.38106400

.04826801

·18012715

.04826801

-11600000

-02400000

24

	RUN NUMBER 630	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 7.000654	
	INC. ENERGY 5.000000	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC.DSE/NT 6.697228	
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (AREA	7)		
,	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAÑ.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1 .	.004000	•004722	•000521	.032000	.048693	.005373
2 [.]	.005000	.010659	•001084	.032000	.053357	.005428
3				.015000	.026294	.003672
4	.001000	•005123	•001148	.018000	.028947	.006488
5				•029000	.045303	•015622
6	.002000	•003399	•001817	•027000	.042088	.022495
7	.001000	.001069	•000737	•054000	.086411	.059594
8	.003000	•003837	•002845	•054000	•108231	.080240
9	.004000	•004906	•003975	•056000	•069362	•056207
10	.004000	•005352	•005076	.086000	.172430	.163512
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
ì	.002000	.003820	•001789	•058000	•110772	.052976
2 .	.005000	•009549	•006436	•059000	•112681	.067364
3	.003000	.005730	•002368	•053000	.101222	•0 63 895
4	.003000	.005730	•003392	•047000	.089763	•056332
5	.004000	.007639	•007773	•031000	.059205	.057062
6	.002000	.003820	•000688	•036000	.068755	.081837
7	.002000	.003820	•004813	.034000	.064935	•066889
8	.001000	.001910	•002406	.043000	.082124	.091279
9	.001000	.001910	•000995	•011000	.021008	.064908
10	.001000	.001910	•002193	•012000	. 022918	•072076
11				.010000	•019099	•069580
12				•009000	•017189	.055327
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.024000	.017203		•024000	.039066	.017203	0,00843
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL . FACT .	FACTOR	FACTOR	FACTOR
.403000	.681118	.418631	016501	826550	.073000	.500000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.505236		1,75604		2,04.733		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 5.00000000 .70711000 .00001010 2A SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)

					•
SCATTI INCHES	ERED FLUX PER N 1.	IEUTRON AT REG	JION BDS. IN	ENERGY GRPS.	5
INCHES	•05939850	•05598955	•03626354	•01729699	•05575850
1 7	•07021644	•06172935	•06181212	•04131633	• 05929369
2	.13792570	•13676187	.06497828	.05374214	•07016898
3	•15325486	•17377315	•07835318	•06043463	•08506928
5	•20776106	•18506127	•07411484	•07633524	•11788238
8	•18968914	•25892544	•11844353	•11670652	•08146780
12	•16573051	•21262820	•13171079	•04972604	•05902024
24	•06726023	•03840401	•03075247	•00862910	•01455796
36		•01071726	•00140801		•00308242
INCHES	6	7	8	9	10
	•03530153	•11115597	•12926499	•12748449	•26173750
1	•11591572	•154591,32	-20018121	•22219876	•40460209
. 2	•11631796	•16770163	•21098964	•21888662	•41874005
3	•17086916	•17429935	•23256132	•25092275	•43763729
5	•14763817	•22669273	•24288229	•16051368	•38910838
8	•12812043	•22203452	•20834403	•16142392	•30578056
12 24	•11891902 •03248807	•22745331 •03095507	•16102036 •03349505	•11182162 •01383942	•14678637 •01546805
36	•00101840	•00126891	*********	•00352837	00283198
30	***************************************	*00126671		•00352831	***************************************
	-				
	ERED FLUX TRANS				
INCHES	1	2	3	4	5
1 2		·	•00190895	•00557783 •00508596	•00454738 •00260598
3	•00463287	•00243318	•00670463	•01251174	•01447536
5	•01142319	•00886115	.02234518	•01588765	.02661936
8	.01796763	•04261271	•02079414	•03519762	.02747593
12 .	.03474738	.05633171	•03856808	•01593872	.01791230
24	.02389145	.02340052	•00675775	•00757045	.00567585
36		.01071726	•00140801		•00308242
INCHES	6	7	8	9	10
1	•00520156	.02518711	•03576909	•06341297	•13616071
2	•02770010	.03186440	.07319770	.05785717	.21837030
3	.02392209	•04174739	•07463118	•08109724	•26087080
5	•03834156	•07129978	•08772313	•07649707	•27065716
8 . ,	•03966473	•09071795	•10714472	•09761497	.22921819
12	•04501367	•06808379	•07360899	•08231370	•11652712
24	•01178546	•00911835	•01258679	•00826692	•01546805
36	•00101840	•00126891		•00352837	•00283198
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
_	1.00000000	1.41420712	8.15888725	1.41420712	2.27684438
1	•91200000	1.39025188	7 • 80432744	1.11439521	2.50625224
2	.82399999	1.29681320	7 • 13691789	•87822262	2.47443549
3	•76799999	1.21457374	6•48890404 5•29097477	•69154728 •42991897	2.50872226
5 8:	•65999999 •54299999	1.05957419 .91771126	4.10398592	•42991897 •20930265	2.25790901
12	•39099999	•62965525	2.42103014	•08060980	2.00023855 1.46542626
24	•08100000	•12876421	•33565814	•00424263	•29009206
36	•01200000	.02385534	•05579838	000101203	.02385534

						•
	RUN NUMBER 631	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 8.574021	
	INC. ENERGY 5.000000	COS. THETA .707110	CUTOFF EGY	INC.FLX/NT 1.414207	INC.DSE/NT 8.202401	
SLAB CONFI	GURATION NE	VADA TEST SI	TE SOIL (AREA	. 7)		
	REC	SION THICKNESS	ES (CENTIMETE	RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	•
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		,
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSÉ REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1.				•034000	•042001	.004635
2	.003000	•006443	•000655	•032000	.039591	•004027
3	•001000	•000873	•000122	.024000	.025642	•003581
4 5	.002000	002240	000770	.012000	.012231	•002741
6	•001000	•002260 •000722	•000779 •000386	•028000	•039427	.013596
7	.001000	•000722	•000602	.026000 .046000	•024962 •078599	•013342 •054207
B	•••••	•000013	•000002	•069000	.091405	•067765
9	.002000	.002260	•001832	•060000	.090146	.073049
10	.002000	•002260	.002143	.119000	.185077	.175504
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•001000	•001910	•000737	•076000	-145149	•060808
2	•••••	***************************************		.059000	•112681	.057540
3	•004000	•007639	.003307	.053000	.101222	.057833
4	•002000	•003820	•001750	•063000	.120321	.056365
5	•002000	•003820	•001183	.040000	•076394	.069530
6	.001000	•001910	.002148	•036000	.068755	.059838
7	•001000	•001910	•002513	•036000	.068755	.067693
8 9				.035000	•066845	.058019
10				.011000 .014000	.021008	.070502
11	•001000	•001910	•000813	•008000	•026738 •015279	•075391 •048052
12	•001000	•001710		.019000	.036287	.106145
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.012000	.006520		•012000	.015691	.006520	0,00398
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT. .412447	REFL. FACT. 020202	FACTOR •793990	FACTOR •075000	FACTOR •463000
•470000	102,001	•			•072000	\$463000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.505236		1,65960		2,24466		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 632 5.000000000 .34202000 .00001010 2A

SCA1	TERED FLUX PER	NEUTRON AT RE	SION BOS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
	•06187700	•07105049	•03871652	•04181902	•05401900
1	•10986337	•10630157	•09536878	•07611622	•08394764
2	•10028122	•11877020	•08718543	•04452563	•13734533
3	14602928	•12746773	•07905363	•03846310	•12524860
5	•18847994	•20447904	•09201805	•12423685	•10897893
8	•27392128	•18413066	•08959677	•06848723	•07948691
12	•16259592	•14189779	•04655753	•05498675	•05065424
24	•02598328	.02872152	•01151525		• 00394405
36	•00129639	. •00126750	•00100045	•00198652	•00133330
INCHES	6	7	8	9	10
_	•07473751	•11746399	•15321297	•24895602	•37240054
. 1	•11048807	•18302562	•21574687	•28897190	•63688915
. 2	•16495672	•21970819	•23598954	•27959757	•53183386
3	•13675918	•20011988	•27133696		•54054931
5	•18373278	•23029965	•21661099	•17175679	•36188095
. 8	•14263747	•17453294	•18603253	•12865809	•18014239
12	•07182340	•10009268	•12166477	•05325343	•06655721
24	•01366251	•01236732	•01971348	•00565835	•02063589
36		•00148165	•00441751		•00479233
SCAT	TERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	•	•00176522	•00217468	•00353284	•01093502
2		•01210396	•00593398	•01457951	•02863096
3	•00497986	•01323741	•00776109	•00948020	•02857648
5	•01555068	•02528568	•01649810	.01951242	•02076078
8	•04080684	•03915017	•02269931	•01967335	•03798883
12	.03787643	•03812796	.02011345	•02580349	.02397757
24	.01107436	•01664694	•00567240		•00394405
36	•00129639	•00126750	•00100045	•00198652	.00133330
INCHES	6	7	8	9	10
1	•01300859	•02384120	•05128633	•09046347	.28861015
2	.02825442	•05721843	•07166128	•11280923	•35209721
3	•03866274	•04526728	•10438046	•13218008	•39170335
5	•07222771	•08435924	•10767110	•09375502	•27943456
8	.05250348	•05287363	•10043701	•08597235	•16873375
12	•03020708	•04533947	•06157631	•03745264	•06238382
24	•00887662	•00368349	•01482843	•00217069	•01263589
36		•00148165	•00441751		•00479233
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
-	1.00000000	2.92380562	16.86810937	2.92380562	4.10845771
1	.82499999	2.27206274	12.77699202	1.78644523	3.69316444
2	•69499999	1.77386849	9.56035247	1.09057951	3.01077317
3	•61399999	1.44285666	7.55843217	•66662771	2.59999868
5 8	•49599999 384 0000	•98357876	4-61804137	• 24852346	2.13099746
	•384999999 •3370000	•67639104 •38870583	2.68494593 1.26982185	•05555230	1.56317856
12	•23799999		•22189640	•00584760	•87593133 •14330144
24	•04900000	•07953288 •01757566	•06039074		•14220166
36	•01300000	•01131300	, •00037074		•01757566

	RUN NUMBER 632	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 17.726378	
	INC. ENERGY 5.000000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 16.958073	
SLAB CONFI	GURATION NE	VADA TEST SITI	E SOIL (AREA 1	7)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	•	
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.001000	.000422	•000047	.035000	.021163	.002335
2	.001000	.000422	•000043	.035000	.024301	.002472
3	.001000	.000349	.000049	•020000	.013242	.001849
4	.001000	.000671	.000150	.020000	.014303	.003206
5	.001000	.000422	.000146	.026000	.018476	.006371
6				•032000	.025562	.013662
7	.001000	.000422	.000291	.062000	.040175	.027707
8	.003000	.001443	•001070	.071000	.052402	•03 88 50
9				.098000	.085148	.068999
10	•004000	•001616	•001532	.156000	.127368	.120780
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•003000	•005730	•001221	•076000	.145149	.029811
Ž ·	.001000	.001910	•000082	.061000	.116501	.029110
3	.004000	.007639	•001729	.056000	.106952	.030910
4	.003000	.005730	•002085	.074000	.141329	.039797
5	.001000	•001910	•000287	.046000	.087853	.040672
6	.002000	•001710	•030=01	•053000	.101222	.048200
7	.001000	•001910	•000950	•049000	.093583	.037839
8	•002000	•001740	•000770	•050000	.095493	.040312
9				.018000	.034377	.045645
10				.011000	.021008	.036905
11				.024000	.045836	.065224
12	•			.037000	.070665	.102236
(S+U) NO.	(S+U) DOSE	. UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.013000	.003327		•013000	•005767	•003327	0,00558
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.555000	.422139	•286232	Q26815	•726262	.C84000	.348000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		•
5805.505236		214522		241578		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 14.000000000 1.000000000 .00001010 2

	SCATTERED	FLUX	PER	NEUTRON	AT	RE	GION	BDS	IN	ENERG	Y GRI	os.		
	INCHES	1		2		-		3			4		5	
		.03058		•038			•0	3280	1451	•0	07844	468	• 0289	3008
1		•07343		•043				4330			24569	977	•0598	312
2		•07997		•098				4351		_	48859		• 0694	-
3		•09571		•110				724			73494		• 0876	
5 8		• 17255		•150				3318	-		7522(• 0879	
12		2025016379		•161 •177				6708 9905		_	55526		• 0845	
24		•04632		•038			-	1114			50326 09232		• 07283 • 02058	
36		.0053		•004				0118		-	02329		• 00359	
-	÷							,		•	·			,,,,,
	INCHES	6		7				8			9		10	
		.03980		•132		-	_	6.549	-	. •	64.346		•1304	
1		.08381		•130	•		_	9492		- •	97412		• 2339	
· 2		-11264		•192				4516			84379		•2155	
5		1480315034		•1678 •1520				4093		-	89590		•2751	
8		•11718		•217			_	5592 0244			07149 89126		•3213	
12		.13142		•112		-		7708			02756		• 28332 • 23078	
24	,	.01739		•026				2805			31302	_	• 08602	
36		.00162		•019				0141			10723		• 02020	-
-						•	- •	• • • •		• • •		,,,	702020	7717
	SCATTERED		TRAN		NT.	ΙN	EGY.		·S•	VS. TH	ICKNE	ESS		
1	INCHES	1		2	3000			3			4		5	
1 2				•004							02833			
3		.00126	101	•0019 •0042			-	0582			06935		• 00533	
5		•00714		•009				0589 1192			05137 14790		• 02000	
á		.02148		•0314				1565	•		21126		•01136 •02018	-
12		.02960		•0220				2540			09227		•01510	
24		.01233		•015		-		0488			3784		•00852	
36		.00535	788	•0049	9110	4		0118			02329		• 00359	
				_										
	INCHES	6		7		_	_	8			9		10	
1		•02295	-	•006	_	_		2346	-		16499		•08720	
2 3		•01732 •03280		•0551 •0348			-	5021			23095		•13331	
5		•03820		•0399				4524 7079		_	26185 52435		•18212 •24039	
8		.02857		•0779				4788			2856		• 23455	
12		.05963		•0464			_	2310			9803		.18076	
24	-	.01178	-	•0138			_	1232			15251		•07338	. –
36		.00162		•019				0141			10723		•02020	
		TAL NO	_	TOTAL F			TOTA			UNC -1			TTL.FLX/	
		ANS•/N •00000		TRANS.			TRAN			TRANS			REGION E	
1	_	• 92700		1.0000		-		0000 62 8 9			00000 51000		1.53970	
2		-88000		1.024	,	_		5012			25000		1.73650	
3		.82999		•9747				0936			17000		1.87821	
5		.73299		•9436		-		2495			7000		1.95298	
8		.60199		.8267		-		6073			75000		1.65518	
12		.43799	999	•6051				8220			4000		1.36207	
24		.13100		-1913	854	1	•9	1472	897	•0	20000	01	. 33499	
36		.09100	1000	•0734	507	0	• 3	2366	190	•00	3000	00	.07345	070

		,	•		•	
·	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET 2541	SLANT MFP 5.802276	
	14.000000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 7.000000	
SLAB CONF	GURATION NE	VADA TEST SIT	TE SOIL (AREA	7)	K	
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	4
,	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO&FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•004000	•005357	•000490	.022000	•030589	•002797
Ž	.004000	004959	•000418	.022000	.038942	•003282
3	.001000	.001187	.000137	.016000	.032804	.003796
4	•002000	.002327	•000432	.005000	.007845	÷001457
5	•003000	.003644	.001041	.016000	.028930	•008266
6	.001000	.001598	•001041	.024000	.039801	.017626
7	•010000	•020958	•011976	•069000	.132748	•075856
8			•000887	.030000		
9	•001000	.001445	•007588	.027000	.065497 .064346	.040234 .046881
	.006000	•010415		-		· · · · · · · -
10	•016000	.020323	•019742	•064000	.130454	.126726
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	,	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•002000	.007639	•005956	•026000	.099312	.034918
2	.006000	.022918	•016901	.025000	.095493	-062147
3	•005000	.015915	•009441	.020000	∕. 063662.	.038185
4	.003000	.009549	•002914	.027000	.085943	.064755
5	.011000	.035014	.027487	.020000	•063662	.045744
6	.002000	.006366	.003517	.024000	.076394	.053581
7	.008000	.025465	.021924	.021000	.066845	.042093
8	.002000	.003820	.003574	.039000	.074484	.065104
9	.003000	.005730	.008551	.027000	.051566	.053521
10	•003000	.005730	.007134	.018000	.034377	.037408
11	•002000	.003820	.006613	.018000	.034377	.061294
12	.001000	.000477	.001614	.030000	.014324	.052974
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN-FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.051000	•046420	•003000	•048000	072212	.043420	001649
*021000	• 0 + 0 + 2 0	•005000				,
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFY
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR/
-295000	•571956	•326921	0,06932	•911190	•270000	•384000°
,		MEAN ENERGY		MEAN ENERGY	•	
		SCAT.TR.NT.		REFL. NT.		<i>/</i> /
7006.802618		480843		328980		,

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 14.00000000 .86603000 .00001010 2

	SCATTERED	FLUX	PER	NEUTRON	AT RE	GION BDS	. IN	ENERGY GRPS.	
1	INCHES	,1.		. 2		3		4	5
		•03936		•0443		•0195		•01855853	•02740249
1	•	•0499	_	•0475		• 0418		. •02622783	•07086856
2		.08302		•0992		•0385		•04659993	•06996578
3		•1556		•0747		•0716		•04113876	•06303960
5	•	•16064		•1644		•1097		•08019529	•08767632
8		.2117	-	•1355	_	•0983		•05639268	•07259896
12		•1442!		•1728		•0703		•03620348	.07933420
24		•06473		•0344		•0236	-	. •00813037	•02453016
36		•00568	5211	•0050	7357	•0011	8343		
1	INCHES	6		7		8		9	10
	•	.08074	4800	•0593	1803	•0679	5848	•06261451	.15461850
1		.10720	3825	•1304	6177	0750	0423	·1C350505	.23877732
2		.12049	920	•1661	6448	•1082	9634	.13264434	.28315904
3	,	.13294	4778	•1306	9055	•1158	6867	÷12903419	•32159164
5		.2049	1946	•1795	8678	•1292	6671	•09945146	•35425835
8		.12643	3711	•1564	1278	•0821	9916	•09679681	•26672614
12		.12482	2776	•1410	5071	•0743	8358	•06173853	.19815141
24		•01974		•0372		•0195		•00941511	•04778245
36		.00414	4692	•0014	1486	•0080	0000	•00326304	•01579397.
	SCATTERED	FLUX	TRAN	NS. PER N	T. IN	EGY. GR	PS.	VS. THICKNESS	•
1	INCHES	1		2		3		4	5 (
1	-								•00265339
2						•0011	0234	•00756278	.01217233
3				•0029	5258	•0031	9486	•00333323	•01083656
5		.00449	9279	•0053	1411	•0144	9626	•00924300	•01454999
8		.02578	8507	•0222	0042	•0208	1598	.02382286	•01927078
12		.02656	5111	•0360	6751	•0257	8956	•00967477	•02738055
24		.0133		•0185		•0057		•00362815	•01345207
36		•0056	8277	•0050	9359	•0011	8343	•	
1	INCHES	6		7		8		9	10
1	Inches	•0110	7494	•0303	7606	•0120	4520	•02269801	•09552985
2		,02334		•0446	-	•0326	_	•03798773	.14783765
3		.02820		•0463		•0419		.05779131	.19721128
5		.0485		•0878		•0508		•04822040	•23926876
8		.0352		•0762		•0265		.05815429	.19745476
12		.0553	5856	•0556	9805	•0422	6671	.02613080	•14974983
24		.01444		•0184		•0113	9389	•00941511	.04117356
36		.00414	4692	•0014	1486	•0080	0000	•00326304	•01579397
								•	
		TAL 44	_	TOTAL C		TOTAL D	055	HAC NO ELLY	TTI ELVINT.
. 1		TAL NO		TOTAL F		TOTAL DE		UNC.NO.FLUX TRANS./NT.	TTL. FLX/NT. REGION BDS.
•		0000		1.1546		0.0828		1.15469441	1.70766559
1		•9180		1.1339	_	7.7044	_	•95955105	1.84789511
2		-8440		1.1028		7.2302		•79558446	1.94373744
3		.78399		1.0523		6.7879		•66048521	1.89684159
5		-6639		•9778		5.8909		• 45494960	2.02515830
8		.53199		•7653		4.1382		•25980625	1.56300519
12		.38499		•5782		2.7424		•12355230	1.22664139
24		-1040	-	•1622		•6409	_	•01270163	•30188966
36		.0230		•0457		•1920		•00115470	•04573329
20				-4.91		/-0	,		

	RUN NUMBER 634	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 6.699855	•
	INC. ENERGY	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC . DSE/NT 8.082861	
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (AREA	71 .		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.004000	.005537	•000506	•017000	•034094	•003117
2	.002000	•003399	.000286	.023000	.038444	•003240
3	.001000	•001069	•000124	.014000	•016933	.001959
4				.011000	•0.16072	•002985
5				.018000	.023731	.006780
6	.003000	.003837	•001699	•040000	.069930	.030969
7	.001000	.001069	•000611	.033000	.051371	•029355
8	.001000	.005123	.003147	.03400C	.058854	•036153
9	.002000	.003399	•002477	.029000	.054226	•039508
10	.008000	.012682	.012320	.073000	.133904	.130078
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	-003000	.005730	•004924	.050000	.095493	.046921
2 .	.002000	.003820	.002169	.032000	.061115	.024600
3	.003000	.005730	.002974	.036000	.068755	.039494
4	•004000	•007639	.004388	.039000	.074484	.044800
5	.004000	.007639	.004373	.022000	.042017	.041502
6	•002000	.003820	•002662	.026000	.049656	.044878
7	*******	••••		•030000	.057296	.064771
8	•002000	.003820	.003427	.025000	.047746	.048652
9	.001000	•001910	.009504	.007000	.013369	.030566
10	*******	***************************************		.011000	.021008	.069098
11	.001000	.001910	.006010	.007000	.013369	.052271
12 ,	• • • • • • • • • • • • • • • • • • • •	••••	•	.007000	.013369	.035122
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN-FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.023000	.022169	.001000	.022000	.036114	.021169	0,00600
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.292000	•497561	•284145	0,07602	•916976	•298000	.387000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
7006.805236	•	381791		364483		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. **ENERGY SET** 14.00000000 •70711000 635 .00001010 2 SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 1 2 3 5 4 .03432853 •03293500 .03382302 •01716502 .05187154 1 .04824123 •04996755 ..03942958 .07596921 .07017643 .06267807 2 •06642180 .04746995 .05359032 .07211916 3 .14796699 .08849341 •04590092 .05595136 .10199284 5 .14443864 -11869805 .09215373 .05743529 .10736172 8 .14819774 .12262473 •05975004 .04263465 •10531276 12 .13994018 .17129111 •07146592 .05847922 .04742502 .04115668 24 •03874856 "01768289 .02015930 .01873599 .00328449 36 .00266934 .00101138 .00274311 INCHES 7 10 .07520501 .08744903 •10216299 .08143401 ·18660650 .10006855 ·15602262 .13121605 .06658404 .30554142 2 ·15209077 •19596039 ·10675220 .09989848 .38715423 3 ·13258037 ·1.7492351 09856687 .08632973 .39092554 .11794811 .15089491 ·10786076 .08689132 .36708179 8 .11145392 -10975477 08422723 ·08927562 .24584375 12 .10445002 ·12398896 •06974316 .06770793 .19578160 24 .02392431 ·03572692 .04156294 .04633183 •01263399 36 .00234699 .00208541 .00100568 .00960586 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 1 .00276980 .00315993 .00110811 2 .00375728 .01365564 3 .00945749 .00570579 .01475676 .01463737 .01129700 5 .01058348 .01443092 .02441670 .02360259 .01578989 8 .01780688 •02951031 .00996928 .03207039 12 .02620970 •03159729 •02169505 .01613759 ·01565884 .01423865 24 **•00804350** ·00789169 .01066218 36 .00328449 •00266934 .00101138 .00274311 INCHES 8 10 .01969616 .03011420 .01771207 .00814989 .12812534 .01404905 .02729653 .03863690 .01520444 .22303161 3 .02167445 •05310241 •04295195 .03013507 .24508949 5 •06069974 .03901552 .04678754 ·03979911 .27883494 8 .03903939 .06561423 .04235070 •04906848 •19976797 12 .03336097 .06902894 .02753568 •02771206 .15855063 24 .01453697 •00612456 ·01849038 •00948361 .03469521 .00234699 .00208541 .00100568 .00960586 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TRANS./NT. INCHES TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 9.89944987 1.41420712 1.41420712 2.07665487 .90000000 1.33543627 1.12570888 9.07364873 2.16892555 .81300000 1.23334688 8.26106693 .89660733 2.14074268 3 .73099999 1.15168540 7.38478355 .71417461 2.03780614 5 .61099999 1.00201381 5.98046408 45254628 1.80331059 8 .45799999 .22768736 •72867487 3.92816182 1.34676256 12 .32999999 •51799601 2.48117679 .09050925 1.14078237 24 .08400000 .12982359

.02475226

.02100000

·52104360

•09853101

•00565682

.30232023

	RUN NUMBER 635	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 8.205620	
	INC. ENERGY 14.000000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 9.899450	,
SLAB CONFI	GURATION NE	VADA TEST SITE	SOIL (AREA	7)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.08.00	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•003000	•002467	•000226	.021000	.024274	.002219
2				.023000	.023289	.001963
3	.002000	.002110	•000244	.020000	.023917	.002767
4 5	.001000	•000722	.000134	.013000	.012138	.002254
6	•002000	•002260	•000646	.023000 .036000	•036679 •053178	.010480 .023550
7	•002000	.001595	•000911	•051000	.061836	.035335
8	•002000	•001445	•000887	.041000	.072240	.044376
9	.001000	•000722	•000526	.036000	.057583	.041953
10	.008000	.006895	.006698	.084000	.131951	.128181
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•011000	•021008	•009391	•063000	120321	.047138
2	.001000	.001910	.000152	.042000	.080214	.035325
3	.002000	.003820	•002571	.034000	.064935	.029811
4 .	•004000	.007639	•003866	.043000	.082124	.032197
5	•001000	•001910	•000307	•035000	•066845	.055115
<u>6</u>				.026000	.049656	.037475
7	202222	20222	000343	•029000	.055386	.043594
8 9	.002000	.003820	•003332	•034000	.064935	•056959
10				.012000 .010000	.022918 .019099	•067670
11				•009000	•017189	.053189 .045646
12				•011000	.021008	•055620
						•
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
::AN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.021000	.010272		•021000	.018217	.010272	0.00740
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.348300	.497085	.293080	0.08922	.903382	.308000	.323000
		MEAN ENERGY		MEAN ENERGY		
		SCAT .TR .NT .		REFL. NT.		
7006.805236		493140		358918		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 636 14.00000000 .34202000 .00001010 2

SCATT	ERED FLUX PER	NEUTRON AT REC	SION BDS. IN	ENERGY GRPS.	
INCHES	1	. 2	3	4	5
	•05110500	•05251351	•02342453	•02520204	•06397149
1 7	•09013922	•09594712	•05088959	•04927871	• 08849247
2	.08827076	•10527291	•06175263	•07416294	•06301125
3	.13611272	•11456628	•05342698	•08436449	•11556266
5 8	•12708354	•12249468	•08178266	•07429344	• 08344183
12	•11448431 •13097033	•07961565 •07069963	•10646045 •05003213	•04112264 •03913176	• 03558966 • 04808971
24	•02860234	•01836102	•00710332	•00968818	• 01060440
36	•00243968	001030102	. •00/10332	•00137367	• 00259059
,,	\$002 43700			************	• • • • • • • • • • • • • • • • • • • •
INCHES	6	7	8	9	10
,	.08281699	•12972949	•14476200	•10650050	•39894901
1	.19428544	•17981871	•15031265	•12814033	• 54542586
· 2	•14462629	•19445364	•15682163	•13845144	•53247402
<u>3</u> .	•14313511	•17943148	•12876328	•15700141	• 47340263
5	.13107908	•17017840	•15251397	•09563770	• 34934797
8	.11520472	•10852945	•08735496	•07649764	• 20206390
12	.06052493	•07490264	•04864226	•03108116	•11221442
24	•02578383	•01423304	•00523164 •00383062	•01574270	•00827607
36	•00220117		•00363062		
SCATT	ERED FLUX TRAN	IS. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1		•		•01024288	•00832192
2	•00349263	•00525311	•00577824	•00505510	•00642122
3	•00663564	•01109529	•00219427	•02381650	• 02826625
5	.01141058	•01964187	•01844665	•02234542	•02493715
8	•01442900	02452755	•01417635	•02112792	•01674581
12	•04855605	•02075336 •00163927	•01151774 •00240355	•00671435	• 01944385
24 36	.01440819 .00243968	•00103927	•00240333	•00137367	• 00565717 • 00259059
30	100243760			*0013/36/	100239039
INCHES	6	7	8	9	10
1	•03896086	.04687128	•01438585	•03410926	• 26765874
2	.05755569	.05485798	.04823412	.05527254	• 36014741
3	.04421419	•07438239	•04085574	.06488827	•37771377
5	•05277828	•09194981	•06939897	•05507219	.28581381
8.	.05334671	•05672108	•05582892	•04533684	•17111431
12	.02716049	•03361945	•03269057	•01594864	•10038344
24	.01512156	•00697510	•00523164	•01333474	•00827607
36	•00220117		•00383062		•
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
1110110	1.00000000	2.92380562	20.46663937	2.92380562	3.92419085
1	80200000	2.24500551	15.21927903	1.82445472	3.39718483
Ž	65499999	1.74235224	11.42475769	1.14028421	2.69958169
3	.55199999	1.38454708	8.65015313	•71048475	2.29625180
5	.41999999	•92663247	5.15805307	•27483775	1.66269101
8	.28999999	•54060203	2.62344883	•06724751	1.03417092
12	.18600000	•32555936	1.28375812	•00877143	•67506038
24	•04100000	•07304728	•25070001		• 14362655
36	•00700000	•01243573	•03034774		• 01243573

	RUN NUMBER 636	HISTORIES 1000	ENERGY SET 2	ANGLE SET	SLANT MFP 16.964728	
	INC. ENERGY - 14.000000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 20.466639	
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (AREA	71		
	REG	ION THICKNESS	ES (CENTIMETE	(RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1690	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	•	
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.001000	.000671	•000061	.026000	•017479	•001598
2				•030000	•017961	.001514
3				.013000	.008012	.000927
4	•001000	•000422	•000078	.012000	•008620	•001601
5	.001000	.000671	.000192	.035000	.021879	.006251
6	•002000	•000771	•000342	.035000	.028325	.012544
7 [*] 8	003000	001031	•000627	•063000 •059000	.044370 .049511	.025354 .030414
9	.002000	.001021	•000021	•051000	•036425	.026538
10				•155000	•136449	•132550
10				•133000	•130473	•.,,,,,,
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	•	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.002000	.003820	.000705	•054000°	.103132	.021652
2 .				.046000	•087853	.017305
3	.001000	•001910	.000357	•064000	.122231	.032894
4	.001000	.001910	•000150	•069000	.131780	.030434
5				.033000	•063025	.024382
6	•002000	.003820	•001154	•029000	.055386	.023236
7			117	•048000	•091673	•038855
8	•001000	•001910	•000117	•055000	-105042	•047464 •029574
9				.012000 .018000	•022918 •034377	•039366
10 11				•013000	.024828	•035877
12				.038000	•072574	.115973
		,				
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR .	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•007000	.001300		•007000	.003557	-001300	0,00046
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.479000	•369031	.239292	01 5593	.843606	.253000	.261000
		MEAN ENERGY		MEAN ENERGY		
	•	SCAT .TR.NT.		REFL. NT.		
7006.805236		0,91859		4,55742		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET .50000000 .70711000 .00001010 2E

	CCATTEDE	SELLIV	050	MENTOON AT D	ECTON BO	C . TA	ENERGY GRPS.	
	INCHES	1	FER	2	3		ENERGY ORPS	
	Meuro	.12935	3305	•03064299	_	42578	•	•08050378
2		1995		•06260619		41072		. 17493767
3	-	.27708		•08567500		47387	-	.12519136
5		.31536		•05898647		17977		.14340457
6		.27310		•04910844		52716		.09582142
8		.24293		•03350287		64674		•05592341
12		•11364	-	•01217634		10040		.01615074
18		.02660		•00312147				•00098029
24		.0018		•00030269		79057		.00013265
-								,
	INCHES	6		7	8		9	10
		.06924	+276	•08202425	•067	85402	•19665762	•35609502
2		.13892	2768	•16101488	•150	99411	•34443894	•54641955
3		.0889	2686	•16290419	•116	08759	•29824130	•33393075
5		.07841	1756	•07813928	•053	43176	•11538435	.14782146
6		•06268	3977	•05603159	•047	06239	•10432313	•07434103
8		•03209	607	•03588793	•016	12479	•04063954	•01819812
12		•00748	895	•00617282	•002	35071	•00755017	•00337321
18		•0007	1745	•00084802	•000	24215	•00023830	•00006621
24		.00002	2690	•00013796	•000	01022		• •
	SCATTERE	FLUX	TRAI	NS. PER NT. I	N EGY. G	RPS.	VS. THICKNESS	
	INCHES	1		· 2	3	•	4	5
2		•0098	7407	•01465094	•035	35987	•04026116	•05310210
3		•03747	7815	•00900259		66267		• 05440991
5		•07366		•02083563		72555		•08985289
6		•08323		•01810782		37816		•05361096
8		•08726		01436917		85909		•03566986
12		•0589		•00522526		14019		•01061149
18		•01516		•00220277		95200		•00072582
24		•00189	237	•00030269	•000	79057	•00009827	•00013265
				_	_		_	
_	INCHES	6		7	. 8		9	10
2		•04886		•05685531		55670		•40142443
3		•0423		•05776032		76639		•29011986
5		•03546		•05083167		67689		•11611576
6		•0333		•03472881		16950		•05810707
. 8		•0198		•02312586 •00421840		05956 57492		•01509948 •00308557
12		•0059	_			17634		•00006621
18 24		•0005		•00070497 •00013796		01022		•00006621
24		•0000	2090	•00013790	•500	01022		
	T	OTAL NO	٦.	TOTAL FLUX	TOTAL	DOSE	UNC.NO.FLUX	TTL.FLX/NT.
		RANS - /		TRANS./NT.	TRANS.		TRANS./NT.	REGION BDS.
		1.0000		1.41420712				2.56698683
2		.63399	-	1.09636995				2.38012481
3		-51899		89389073				1.97652703
5		36999		•60392719		98771		1.30820365
6		-3027		•50193429		85158		1.04494154
8		. 2024		•33367679		90744		•64739360
12		.0794		•13200795		38132		-23235586
18		.0158		•02674267		79040		•04285490
24		.0019		•00339163	_	20748		.00339163

·						
•	RUN NUMBER	, HISTORIES	ENERGY SET 2E	ANGLE SET	SLANT MFP 21.5524773	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	
	•5000000	•7071100	•0000101	1.4142071	3.3940971	
	•300000	*1011100	•0000101	1041.2011	3037.07.2	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (AREA 7	' }		•
	REG	ION THICKNESS	ES (CENTIMETE			
5.0800	2.5400	5.0800	2.5400	5.0800	10.1600	•
15.2400	15.2400					
	Num	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		,•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•0011641	•0014442	•0003912	•0685625	•0914668	•0247723
2	•0001719	•0002200	•0000568	•0158125	•0216680	•0055976
3	•0004375	•0005723	•0001407	•0707500	.0837401	•0205861
4	•0000703	•0000791	•0000195	.0257500	.0396538	•0097482
5	.0000938	•0000932	•0000276	•0390000	•0569250	•0168404
6	.0000234	•0000204	•0000077	•0382500	•0489622	•0185648
7	.0000313	•0000830	•0000415	•0370625	•0580002	•0290001
8	.0000078	•0000068	•0000040	•0330000	• 0479802°	•0279885
9				•1072500	•1390586	•1042940
10				•1832500	.2517984	•2308151
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
· ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•0004453	•0008505	•0001633	•0856875	.1636507	.0644319
2	•0001797	•0003432	•0000828	•0856250	•1635313	.0847904
3	•0003125	•0005968	•0001382	•0736250	•1406131	•0651636
4	.0003203	•0006117	-0001474	•0890000	•1699771	•0840657
5	.0001406	•0002686	•0000999	•054000C	•1031322	•1003723
. 6	.0001719	•0003283	•0001206	•0455000	•0868984	•0629697
7	.0001484	•0002835	•0001079	•0670000	•1279603	•1067606
8	•0001172	•0002238	•0000831	•0590000	•1126814	•0952676
9	•0000313	•0000597	•0000636	•0100000	•0190986	•0401068
10	•0000469	•0000895	•0001134	•0142500	.0272154	•0625234
11	.0000391	•0000746	•0000829,	•0160000	•0305577	•0661346
12	•0000469	•0000895	•0001126	•0190000	•0362872	•0998177
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN'. FACT.	TRAN. FACT.
•0020000	.0006891		•0020000	•0025191	.0006891	•0000286
NUMBER	NO FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
NUMBER: REFL. FACT.	NO. FLUX REFL. FACT.	DOSE REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.6186875	.8392532	•4882070	•2577905	•7421699	•0017656	• 3775469
*0100075	*0372732	14002070	02311303	01424077	1001,000	03,,
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
24.02205236		•0071396		•2083366		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET .50000000 .34202000 .00001010 2E

SCATTE	RED FLUX PER I	NEUTRON AT REC	SION BOS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
Meuro	.09867827	•01277202	•13061925	•04939362	•09782598
•					
2	.17939288	•04161679	•24291771	•08831292	•11690197
3	.17290496	•06208454	•19139630	•07019021	• 09 5 9 5 3 2 7
5 ·	•19669591	•04405250	•15233821	•03912077	•06817271
6	•16667568	•05019532	•13519611	•03259163	•04632017
8	•12469398	•01707037	•08361331	•01962342	•03705585
12	.06793106	•00893617	•03870459	•00587749	•00667257
18	.01454085	.00126289	•00520190	•00096711	•00122339
24	.00129134	•00008507	•00036844	.00004443	•00004608
INCHES	6	7	8 `	9	10
.,,,,,,,	•04520200	•08175402	•09795263	.22235787	•79825677
2	•09525400	•12846637	•09025119	•32669357	•43258686
3	•06254612	•10768851	•08576059	•20246664	• 22846646
5					
-	.03856291	•04973517	•05062905	•08893348	•04700824
6	•03203635	•03041520	•02547453	•06080426	•03003616
8 .	.02111530	•01628544	•02118619	.02154891	•00.865248
12	•00318319	•00757652	•00422312	•00578506	•00090667
18	•00024827	•00037878	•00008407	•00074603	
24	•00004803	•00005940	•00009008	•00001685	
•					
SCATTE	RED FLUX TRANS	S. PER NT. IN	EGY. GRPS. V.	S. THICKNESS	
INCHES	1	2	3	4	5
2	•00494452	•00499775	•04512386	.02142584	•04154524
3	.02696390	•01208602	•05836024	.03525768	•03226952
5	•05553683	•01647278	•06705589	•02061720	·04112827
6	•05884424	•01810061	•06717861	•02000937	• 02451557
8 .	•05390096	•00969577	•04179013	•01453272	•02129472
12	•03042658	•00415706	•02505725	•00373949	•00420783
18	•00794553	•00067499	•00341650	•00073561	•00093040
24	. •00129134	•00008507	•00036844	•00004443	• 00004608
INCHES	6	7	8	9	10
2	•03942322	•04810947	•02460656	•14917850	• 35064074
3	•02522104	•04708966	•04082679	•12041221	•19057777
5	•02351148	•02679206	•03069577	•05960311	• 03804450
6 ,	.01792263	•01994375	•01492421	•04361212	• 02729687
8	•01252826	.01171959	•01211860	•01733015	• 00865248
12	.00220257	.00543761	.00236179	•00546809	.00090667
18	•00014219	•00030476		•00069293	
24	•00004803	•00005940	•00009008	•00001685	
27	•000004003	***************************************	***************************************	***************************************	,
			•		
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
INCHES					•
•	1.00000000	2.92380562	7.01713350	2.92380562	4.45351626
2	•42499999	•80016714	1.43028518	•07017134	1.81256560
3	•33099999	•59783626	•89527627	•00877143	1.28822901
5	.23074991	• 37945788	•41821605		•77524895
6	19249992	•31234798	•31944728		• 60974542
8	•12849995	•20356339	•18227268		• 37084526
12	•05274998	•08396494	•06604680		• 14979642
18	•00949999	•01484291	•01032350		• 02465328
24	.00125779	•00204973	-00142774		.00204973

	RUN NUMBER	HIŞTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 44.5587165	
	INC. ENERGY .5000000	COS. THETA. .3420200	CUTOFF EGY •0000101	INC.FLX/NT 2.9238056	ÍNC.DSE/NT 7.0171334	
SLAB CONFI	GURATION NEV	VÁDÁ TEST SIT	E SOIL (AREA	71		
•	REG	ION THICKNESS	ES (CENTIMETE	RS)	•	
5.0800 15.2400	2.5400 15.2400	5.0800	2.5400	5.0800	10.1600	
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		,
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTÓR
1	•0007578	•0004475	•0001212	•0490703	•0337499	•0091406
2	.0000703	•0000280	•0000072	•0067500	•0043683	•0011284
3	•0002500	•0001296	•0000319	•0673125	• 0446744	•0109825
4 5	.0000313	•0000165 •0000159	•0000041 •0000047	•0305000 •0517500	•0168936 •0334584	•0041530 •0098981
6	•0000391	•0000155	•0000063	•0250000	•0154600	•0058619
7	•0000469	•0000231	•0000116	•0430000	•0279615	•0139808
8	•0000156	•0000316	•0000184	•0442500	•0335018	.0195427
9	.0000156	•0000055	•0000041	1095000	•0760508	.0570381
10		•		•3272500	•2730198	•2502681
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	•	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.0002578	•0004924	•0000522	•0892500	.1704546	.0351093
2	•0002344	•0004476	•0000502	•0755625	•1443134	.0364156
3	•0001875	.0003581	•0000429	•0846328	•1616364	•0411968
4	•0001484	•0002835	•0000340	•1121875	•2142618	.0586536
5	•0001016	•0001940	•0000381	•0685000	•1308250	•0621051
, 6	•0001094	•0002089	•0000376	•0477500	•0911956	•0345224
7	•0000781	•0001492	•0000292	•0682500 •0977500	•1303476 •1866883	•0602 530 •0870 439
8 9	•0000703 •0000156	•0001343 •0000298	•0000241 •0000258	•0210000	•0401070	•0687100
10	•0000136	•0000298	•0000238	•0140000	•0267380	•0282052
11	•0000234	•0000149	•0.000176	•0330000	•0630252	•0943998
12	.0000234	•0000447	•0000238	•0425000	.0811688	.1229390
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•0012578	•0002094	NOT IMETOR	•0012578	•0007142	•0002094	•0000400
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•7543828	•5591386	•3819943	•3947962	•6051495	.0005078	.2438516
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		•
24.02205236		•0159077		.2616683	•	

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 1.000000000 1.000000000 .00001010 2D

	SCATTERED E	ILIX PEP	NEUTRON	AT 6	PEGTON	BDS -	ŢΝ	ENERGY GRPS	. .	
	INCHES	1	2	~! ·		3	• • • •	4	5	
		2738527	•1319	0913	3	63018	121	•0298163		54
2	• -	1756384	2566			14750		•0596923		
3	_	6578294	•2663	_	_	90171		.0619623		_
5		9844131	•2208			92208		.0524888		
6		8898141	•2294			96315		0413089		
8	•2	3423551	•1711			57416		•0376558		
12	•1	4009119	•1038	6963	• 0	23804	95	.0094217		
18	•0	4111043	•0190	5868	3 .0	07348	199	•0032104	0 .002693	58
24	•0	0651836	•0030	7986	• 0	00432	94	.0003956		
	INCHE'S	6	7			8		. 9	10	
_		1653028	•0662			39468	_	•1924465		
2		9333396	•1294			89513		•4002263		
3	-	8542409	•1371			87083		•2837918		
5		5317875	•1020			50891		•2238458		
6		4193591	•0941			62173		.1774475		
8		2717296	•0581			33199		•0847375		
12		1477030	•0221			10414		•0214538		
18	•0	0141540	•0029			04095		•0046034		
24			• 0004	9071	. •0	00142	71	•0007951	.3 •.000134	77
	SCATTERED F	LUX TRAN	S. PER N	T. I	N EGY.	GRPS	. V	S. THICKNES	5	
	INCHES	1	2			3		4	5	
2	•0	0599974	•0217	7695	• 0	28419	07	•0067991	9 .041808	80
3	•0	0873377	•0584	0272	• 0	34026	82	•0291494	8 .042526	21
5	0	4540450	•0600	3584	• 0	40441	30	•0219666		
6	•0	5189272	•0738	3375	• 0	45144	41	•0188727	2 •034130	81
8	•0	6883825	•0807	7972	. •0	25663	06	.0184843	6 •014252	18
12	•0	5492679	•0487	9476	• 0	16436	13	•0049902	3 .009573	61
18		2207643	•0095	1576	• 0	04543	54	•0021603	001467	64
24	•0	0651836	•0030	7986	• 0	00432	94	•0003956	0 .000064	33
	TAICHEC	,	-			•		•	• •	
	INCHES	6	7	2451	_	. 8 . 1 0 3 0 13		9	10	• •
2		2992548 3404948	•0386		_	19397		.1456333		_
3 5	• •	1275958	•0406 •0464			30556 28990		•1495209 •1209380		
6		1482355	•0388			37325		•1097946		
8		1354537	•0296			15868		0585723		
12		0551086	•0144			04900		•0167838		
18		0050444	•0007			03339		.0033338		
24			•0004			00142		•0007951		
-							_	••		
		L NO.	TOTAL F			L DOŞ		UNC.NO.FLU		-
:		S./NT.	TRANS			S./NT	-	TRANS./NT.		
		0000000	1.0000		_	99999		1.0000000		-
2		3299999	•9289	_ :		28985		•2520000		-
3	-	3199999	.8150			68031		•1260000		
5		7599999	•5876			70203		•0310000		
6		2599999	•5377			47730		•0150000		_
8		4049999	•3791	_		02196		•0039999		
12		1550000	•1910			33306			• 376599	
18		3049999	•0491		_	50495			•088048	
24	. •0	0731249	•0120	5459	•0	10568	71		. •012054	59

			•			•
	RUN NUMBER	HISTORIES - 1000	ENERGY SET	ANGLE SET 254 1	SLANT MFP 16.549650	
	INC. ENERGY 1.000000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 3.800000	•
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (AREA	71		
			ES (CENTIMETE			•
5.0800 15.2400	2.5400 15.2400	5.0800	2.5400	5.0800	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	•	•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003625	.006821	.001149	.058000	.127385	.021454
2	•002000	.003134	•000487	.068750	.131909	.020481
3	.000250	.000596	.000111	.032000	.063018	.011774
4	.000312	.000398	•000095	.015000	.029816	.007140
5	.000062	.000063	•000020	.017500	.032758	•010344
6				.011500	.016530	.006090
7	.000312	•000666	•000316	.035000	.066285	.031398
8	.000125	.000144	•000083	•019000	.039468	.022850
9	.000562	•000803	•000591	•097000	.192447	.141803
10	•000062	•nnn136	•000122	•292000	•512711	•458741
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•000750	•1028 6 5	•000543	•056000	•213904	.145367
2	.000937	.003581	•000862	•045500	.173797	•112577
3	+000812	•002586	•000704	•061500	•195760	•135467
4	.000625	.001989	•000505	•049500	•157563	•117357
5	•000750	.002387	.001090	.046750	.148809	•111319
6	•000500	.001592	•000347	•045000	.143239	. 117742
7	•000375	•nn1194	• 000534	•.053500	.170295	•154221
8	.000625	.001194	•000426	•076009	.145149	.144562
9	•000750	•001432	•000705	•064000	.122231	•140536
10	•000375	•^^0716	• 0 0 0 4 4 5	.051250	.097880	.151357
11	•000250	•000477	•000206	.043250	.082601	.12398?
12	•000562	•000269	•0003 2 2·	•053500	.025544	.081772
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN- FACT.
•007312	•002974		•007312	•012761	•.002974	•000600
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ARS.	NUMBER ARS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•645750	1.212328	•732076	•327482	•671907	•002250	•344687
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
3803.402618		•082088		•507134		

	**************************************		CLON DOC 111	ENERGY CORS	
INCHES	TTERED FLUX PER 1 1	NEUTRON AT REC	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ENERGY GRPS.	5
INCHES	•07597841	•10514261	•06197613	•04087102	•06249938
2	•16859622	•17881090	•08910813	•05710081	• 09001301
3.	.19746659	•16738825	•10352907	.06658211	.09296948
5	.17890946	•17351750	•06440035	02874098	.05357180
6	•15413186	•13137695	•05659179	•02279022	•03176063
8	•13885437	•08909298	•03755417	•02010520	•02460236
12	•07219327	•04450213	•01651871	•00849203	•01001776
18	.02173451	•01172802	•00280378	•00117881	•00118470
24	•00219189	•00115432	•00027791	•00011790	•00010384
INCHÈS	6	7	8	9	1 ọ -
_	•05733826	•08389114	•08729603	• 27665448	• 945/57703
2	•05849225	•08388946	•06997639	• 27516090	•35748588
3	•04227092	•10402593	•04518356	-	•23250325
5	•03404900	•07455222	•03373127	•11560487	.04636419
6	•03189040	•06079393	•02017491	•07591491	• 02968834
. 8	•02018304	•03814211	•02268067	•04303096	•01080611
12	•00531749	•00747931 •00103042	•00246517 •00072748	•00803567 •00221770	• 00264782
18 24	•00050473 •00004189	•00103042	•60002510	•00221770	•00030742 •00001749
24	•00004107	•00001020	¥30002310	•00017740	***************************************
	TIESES ELUV ISAN	C DED 5.7 IN	ECY CBBS	ue tuleviece	
INCHES	TTERED FLUX TRAN. 1	2 PER NI - IN	EGY. GRPS.	VS. THICKNESS	5
2	•00367848	•01650424	•03384110	•01422058	•03603471
3	•01636728	•03753514	•03214650	•02979145	.05446215
5	.03376676	.04454831	.03023227	.01439898	.03028507
6	•04428422	•05386625	•02499822	•01396308	.01571598
8 .	•04757702	•04041646	•02323616	•01034906	•00908518
12	03227577	•02167024	•01146101	•00490009	• C0784670
18	•00967988	•00666284	•00179894	•00093634	•00071687
24	•00219189	•00115432	•00027791	•00011790	•00010384
INCHES	6	7	8.	9	10
2	•02238231	•04590694	•03599737	•15609569	•30329752
3	•02260377	•04434034	•02235550	•15597738	•19756215
5	•01144389	•05022561	•01689748	•C8188174	•04355151
6	•01591579	•03499547	•01278389	•05421078	•02748119
8	•01391955	•01964240	•00660004	•03550907	•00935792
12	•00267424	•00557491	•00086970	•00664107	•00240039
18	•00022477	•00069666	•00044337	•00168149	•00030742
24	•00004189	•00001820	•00002510	•00019740	•00001749
•					
11161166	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS,/NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
2	1.00000000	2.92380562	11.11046136	2.92380562	4.63384064
2 3	• 36899999 • 31799999	•71806364 •61898928	1.95609534	•04970470	1.47833866
5	• 21399999	•35723162	•64255368	•00584760	1.28917037 .80344165
6	•18049993	•29821487	•46947004		•61511395
8	•12799995	•21571286	•28938346		•44505197
12	•05599998	•09631412	•09726973		•17766935
18	•01331248	•02314858	.02132350		•04341755
24	•00245311	.00414594	•00322594		•00414594

ı	RUN NUMBER 35-3	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 48.3879598				
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT				
	1.0000000	•3420200	•0000101	2.9238056	11.1104613				
SLAB CONFI	GURATION . NE	VADA TEST SIT	E SOIL (AREA	71					
	REG	ION THICKNESS	ES (CENTIMETE	RS)					
5.0800	2.5400	5.0800	2.5400	5.0800	10.1600				
15.2400	15.2400								
NUMBER OF SCATTERED NEUTRONS VS. ENERGY									
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR			
1	.0013125	•0007737	•0001303	•0401250	•0259861	•0043766			
2	•0006875	•0004345	•0000674	•0536875	•0359609	•0055834			
3	•0001094	•0001079	•0000201	•0345000	•0211971	•0039605			
4 5	.0000781	•0000396 •0000357	•0000095 •0000113	•0215000 •0350000	•0139787 •0213760	•0033475			
6	•0000781	•0000337	•0000113	•0287500	•0196108	•0067503 •0072250			
7	•0000115	•00000152	•0000031	•0422500	•0286924	•0135911			
8	•0000156	•0000105	•0000061	•0340000	•0298570	•0172856			
9	•0001094	•0000728	•0000537	•1105000	.0946214	•0697210			
10	•0000156	•0000066	•0000059	•3910000	•3234063	.2893635			
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE					
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.			
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER			
1	•0005000	•0009549	•0000691	•0963125	•1839429	•0398498			
2	•0003750	•0007162	•0000750	•1088750	•2079354	•0605733			
3 '	•0003594	•0006864	•0000662	•0966875	•1846591	•0489282			
4	•0003906	•0007460	•0000561	•0793750	•1515947	•0367488			
5	.0000625	•0001194	•0000135	•0720625	•1376289	•0676290			
6	.0002031	•0003879	•0000590	•0626875	•1197240	•0598852			
7 8	•0001719	•0003283	•0000454	•0600000	•1145913	•0392901			
9	•0001719	•0003283	•0000365	•0780625	•1490880	•0597536			
10	•0000781 •0000625	•0001492 •0001194	•0000511 •0000402	•0377500 •0335000	•0720970 •0639801	•1147273 •0918220			
11	•0000823	•00001194	•0000196	•0282500	•0539534	•0688049			
12	•0000469	•0000397	•0000190	•0377500	•0720970	•1164279			
-									
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.			
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.			
•0024531	•0003123		•0024531	•0015011	•0003123	•0001195			
NUMBER .	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS'.	NO. CUTOFF			
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR			
•7913125	•6146867	•4212047	•4467593	•5531065	•0015625	•2046719			
		MEAN ENERGY		MEAN ENERGY					
		SCAT . TR.NT.		REFL. NT.					
38.03405236		•0487165		•5645801					

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 2.00000000 1.00000000 .00001010 2C SLAB CONFIGURATION NEVADA TEST SITE SOIL (AREA 7)

SCATT	ERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1	2	· 3	4	5
	•09036066	•11647968	•07028833	•04565018	05054826
2	•17439187	•19880301	•13799271	•12555843	•10366009
3	•22808632	•21420454	•10818339	•14268872	• 08255218
5	•22205969	•23392327	•14258973	•14864250	•10839270
6	•28063364	•27303553	•16632472	.13601667	• 09372331
8	•25697565	•22386906	•12252740	•10461078	•06345169
12	•22149482	•14702290	•08593877	•06362198	•04273992
18	•09789086	•06206542	•03121956	•02634937	•01746754
24 .	•01593917	•01052913	•00522045	.00360702	• 00344844
THEHE	,	-	٥	9	• •
INCHES	•01114016	05477472	8 •05083841	•14744168	10 •37274493
2	•05792802	•12310327	•08910782	27329773	•50574792
2	•06062158	•12516543	•12823530	•27896282	•49792992
3 5		•14670469	•11771311	23079435	• 39002655
	•03906939 •04940984	•13589301	.09423870	21541374	•38369860
6		•09984656	•08085408	18621420	• 26469754
8	•04442401				
12	•03085941	•06325708	•04479590	.08701419	•10772993
18	•01196574	•02702518	•01669757	02644382	•02723902
24	•00160353	•00478808	•C0241872	•00398692	•00568877
SCATT	ERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
2	.00222181	.00922536	.00472731	.02450834	•01161741
3	.01054864	•01706648	•01229900	.03744795	.02321479
5 ·	.02415164	.03759116	.03810010	.04941196	.03338885
6	.03976305	•05855940	.04102183	.03535674	• 02789959
8	•05037652	•04918827	.03872736	.03733101	.02052805
12	.06342618	.04168397	.03790569	.02241840	•01657232
18	.03473487	.02446370	.01342792	.01277853	.00840033
24	•01593917	•01052913	•00522045	.00360702	.00344844
		_	_	_	
INCHES	6	7	8	9	10
2	.01623188	•01099775	.02677843	•06904482	•26310809
3	•00768129	•01966767	•03049749	•08566818	• 27213519
5	•00458126	•03916146	•03934846	.08452196	•25907021
6	.01145154	.04435679	.03156235	•08238760	•23801350
8	•01348910	•03580681	•02879988	.08245109	• 18467993
12	•01300547	•02534843	•01937954	•04795340	•07395866
18	•00621567	•01273193	•00962231	•01629583	•02109145
24	•00160353	•00478808	•00241872	•00398692	.00568877
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION PDS.
111-11-0	1.00000000	1.00000000	4.29230769	1.00000000	1.95525615
2	79399999	1.01246121	4.06818642	57400001	2.36359087
3	71399999	•95022668	3.64155261	43399999	2.30063020
5	58899999	.85832705	2.93788785	24900000	2.02891599
6	53499999	.79837240	2.57851924	18799999	2.01638776
8	42949987	•64937803	1.96991493	.10800000	1.55547098
12	26424991	•39665206	.96787251	•03499999	.92947489
18	10624989	16576253	•33862154	00599999	•35036410
24	.03668736	.05823023	.09991843	.00100001	.05823023
- · ,	,			-	

		•	•		•	
•	RUN NUMBER	HISTORIES	ÉNERGY SET	ANGLE SET	SLANT MFP- 6.672268	
	23-3	1000	20	2541	0.012200	
	INC. ENERGY	COS. THETA	CUTOFF, EGY	INC.FLX/NT	INC.DSF/NT	
	2.000000	1.000000	•000010	1.000000	4.100000	
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (AREA	71	•	
	DE G	ION THICKNESS	ES ICENTIMETE	DCI		
5.0800	2.5400	5.0800	2.5400	5.0800	10.1600	
15.2400	15.2400	2.0000	2 - 3 - 00	3.0000	1001000	•
1342400	1302400	•				
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.009969	.016800	.002622	.045703	.090361	.014105
2	.006531	.010917	•001571	.061281	.116480	016762
3	.003109	•005571	•001101	.032734	.070288	.013886
4	.002156	.003740	•001186	.025953	.045650	.014474
5	.001875	.003598	.001580	.027516	.050548	.022192
6	.000922	.001618	.000868	.006594	.011140	.005978
7	.003016	.004936	.003371	.029203	.054775	.037407
8	.001500	.002566	.002128	.027937	.050838	042159
9	•002531	•004278	•004069	.075687	.147442	.140249
10	•004078	•005850	•005850	•205750	•372745	.372745
••	•00.0.0	•302020	***************************************	•••		•3,4,1,5
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	POSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•004406	•^16831	.008333	•049594	•189434	.134417
2	.003422	•013071	•005735	.031922	•121932	.084738
3	.003859	.012285	•006051	.042531	•135381	.097179
4	.003375	.010743	•005477	.050625	•161144	.125712
5	.003125	.009947	•005683	.048953	.155822	.143142
6	•003000	.009549	.005344	.051203	•162984	.152978
7	.002812	.008952	.005012	.038453	.122400	.129277
8	.003172	.006058	.003495	.071156	.135898	.155123
ğ	.002875	.005491	.004034	.044281	.084571	.106799
10	.002172	.004148	.003434	.039375	.075200	101969
11	.001297	.002477	•002398	.019875	.037958	.066937
12	•002172	•201037	•002391	.050391	.024060	.092310
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•036687	.025346	•001000	.035687	.059875	•024346	.007598
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ARS.	NUMPER ARS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•538359	1.010267	•679957	•250426	•740966	.002047	.422906
		MEAN ENERCY		MEAN ENERGY	:	
		MEAN ENERGY		MEAN ENERGY	·	•
.104 .00435		SCAT.TR.NT.		REFL. NT.		
4104.102618		•425782		•930331		

```
RUN NUMBER
                            INC. ENERGY
                                                         CUTOFF EGY.
                                                                      ENERGY SET
                                           COS. THETA
                               .10000000
                  669
                                            1.00000000
                                                           .00001010
  SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                             .19527997
                                                           .05871469
                .16605722
                               .04638840
                                                                          .10990221
                ·36773996
                               .06684423
                                             .43544717
                                                           .13663717
                                                                          .26130998
1
                                                           .14965692
2
                +46961606
                               .06935401
                                             .48118287
                                                                          •32619790
3
                447910212
                               .11574264
                                             •49914805
                                                           .15875968
                                                                          ·26021838
5
                               .08224879
                .37443232
                                             .27182197
                                                           .09568750
                                                                          .12657298
8
                .25860779
                               .03467852
                                             .12600874
                                                           .03268435
                                                                          .05632780
12
                .12026164
                               .01736304
                                             .05339728
                                                           .00656829
                                                                          .01253606
                +00651918
                               .00107469
                                             .00673641
18
                                                           .00311118
24
                                             .00104661
  INCHES
                                  7
                                                8
                                                               9
                                                                           10
                   6
                124692621
                .34827861
 1
2
                +34955038
3
                .28573767
 5
                .16274582
8
                .04435182
12
                ▶00555358
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                  2
                                             .10378394
1
                -01468116
                               .00654810
                                                           .04867308
                                                                          .15930816
2
                .05133768
                               .01236817
                                             .13913888
                                                           .08529114
                                                                          .20790219
3
                               ·01590364
                ·11675420
                                             17528558
                                                           .08042136
                                                                          .16235408
5
                               .04290687
                                             .13602891
                                                           .05786378
                .14222860
                                                                          .09936941
8
                .10922479
                               .01795833
                                             .07473463
                                                           .02817213
                                                                          .03709733
12
                .04525597
                               .01241396
                                             .03976693
                                                           .00656829
                                                                          .01112366
                                             .00673641
                                                           .00311118
                .00531019
                               .00107469
18
                                             .00104661
24
  INCHES
                                  7
                                                                            10
                .20025001
1
2
                .23176427
                .22474594
3
5
                .12995254
 8
                .04081952
                 .00555358
12
18
24
                            TOTAL FLUX
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TTL.FLX/NT.
              TOTAL NO.
                                           TRANS./NT.
  INCHES
                            TRANS./NT.
              TRANS./NT.
                                                         TRANS./NT.
                                                                       REGION BDS.
                             1.00000000
                                            1.09999999
                                                          1.00000000
               1.00000000
                                                                         1.78336594
                                                                         2.17925711
 1
                .86599999
                              1.09624445
                                            1.04022408
                                                           .56299999
                                                           .31600001
                              1.04380233
                                             .90669260
 2
                .74099999
                                                                         2.16155814
 3
                                                           •17799999
                .62699999
                               .95346481
                                             .77639698
                                                                         1.97670855
 5
                .41799999
                               .66435011
                                             •49408218
                                                           .05600001
                                                                         1.16950938
                                                           ·0100000
 8
                 .20299999
                               .31800672
                                             .22104497
                                                                          .56265902
12
                ·06800000
                               -12168240
                                             .07844899
                                                           .00100001
                                                                          -21667989
18
                .01000000
                               .01623247
                                             .01010678
                                                                          .01744147
```

.00104661

.00104661

24

	RUN NUMBER 669	HISTORIES 1000	ENERGY SET 2E	ANGLE SET 2541	SLANT MFP 13.811239	
	INC. ENERGY	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 1.100000	
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (50%	SATURATED)		
2.5400 15.2400	REG 2.5400 15.2400	ION THICKNESS 2.5400	ES (CENTIMETE 5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR .001000	NO. FLUX TRAN.FACTOR .001065	DOSE TRAN. FACTOR .000571	NO. REFL. FACTOR .101000 .026000 .110000 .036000 .057000 .101000	NO.FLX.REFL FAC TOR .166057 .046388 .195280 .058715 .109902 .246926	DOSE REFL. FACTOR .098125 .026146 .104741 .031492 .070937 .204275
	NŲM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .038000	NO. REFL. FACT/STER .145149	DOSE REFL. FACT/STER .094891
2 3 4 5 6 7 8 9 10 11	.001000	.003820	.002181	.033000 .038000 .041000 .029000 .032000 .036000 .036000 .039000 .039000 .036000	.126050 .120957 .130507 .092310 .101859 .076394 .068755 .087853 .074484 .077488	.079784 .083408 .095267 .074619 .081957 .068775 .068457 .104632 .099617 .131483
(S+U) NO. TRAN.FACT. .001000	(S+U) DOSE TRAN. FACT. .000571	UNSCAT.	SCAT. NO. TRAN. FACT. .001000	SCAT.NO.FLX TRAN. FACT. .001065	SCAT. DOSE TRAN. FACT. .000571	SCAT. EGY. TRAN. FACT. Q00006
NUMBER REFL. FACT. .431000	NO. FLUX REFL. FACT. .823269	DOSE REFL. FACT. .535717	ENERGY REFL. FACT. 011662	ENERGY ABS. FACTOR .883316	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .568000
1102.202618		MEAN ENERGY SCAT-TR-NT- Q00582	•	MEAN ENERGY REFL. NT. Q02706		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. **ENERGY SET** .86603000 .10000000 670 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. 5 INCHES 1 2 3 .24657102 .17176355 .05407848 .09590647 .14294099 .30791493 .33643462 •09901852 •45289831 .18832371 1 2 .36151771 .11381797 •49076062 17630078 .32472030 3 .41709953 .14845183 •46380317 .11677172 .22391309 .07407012 .28849378 .08856880 .14157699 5 .38837731 .06348459 8 .23317551 .04524569 .15208252 .02436951 12 .09815022 .01019617 .05673816 .00568422 .01547266 .00229222 .00311118 18 .00300916 .00104661 24 INCHES 7 A 9 10 6 .22459501 1 .40637722 .34383044 2 .26225505 3 .10319505 5 8 .03104498 12 .00100171 18 2.4 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS 5 INCHES 1 3 4 .17811483 .09813988 .06596841 .03137105 1 .01023263 .02823042 .16659985 .08989330 .20873397 2 .02431331 3 .12585613 .03031378 .19478569 .08582664 .15873167 5 .14424049 .02634161 .15384396 .05812520 .09979923 .10474111 .02855446 ·10296830 .02008344 .05412933 8 .05319886 ·00588286 .02804983 .00568422 .01084101 12 18 .00300916 .00229222 .00311118 .00104661 24 9 10 INCHES 7 .25094985 1 2 .24092674 3 .20762701 5 .08925381 .02810550 8 12 .00100171 18 24 UNC.NO.FLUX TOTAL NO. TOTAL FLUX TOTAL DOSE TTL.FLX/NT. TRANS./NT. REGION BDS. INCHES TRANS./NT. TRANS./NT. TRANS./NT. 1.00000000 1.15469441 1.27016384 1.15469441 2.05093177 .84599999 .59466761 1 1.22944426 1.15967350 2.38563492 .30599402 2.11694184 .70199999 .91568797 2 1.06469162 .59699999 .96017937 .76220662 .15703844 1.78933283 3 .39099999 •44209917 .04156900 1.12587106 5 .61317330 .00461877 .55402157 8 .19800000 .34320092 .22945184 .10465849 .06604869 .18724314 12 .06900000 .00841257 .00514193 .00841257 18 .00600000

.00062796

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	RUN NUMBÉR 670	HISTORIES 1000	ENERGY SET 2E	ANGLE SET	SLÁNT MFP 15.947761	
	INC. ENERGY	COS. THETA .866030	CUTOFF EGY .000010	INC.FLX/NT 1.154694	INC.DSE/NT 1.270164	. •
SLÁB CONFI	GURATION NEV	ADA TEST SITE	SOIL (50% S	ATURATED)		
	066	ION THICKNESS	EC //ENTIMETS	:06)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		, •
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN.	NO. REFL. FACTOR .097000	NO.FLX.REFL FACTOR .148752	DOSE REFL. FACTOR .087899
2 3 4 5	•001000	•000885	•000474	.029000 .131000 .043000 .067000	.046834 .213538 .083058 .123791	.026397 .114534 .044549 .079902
6 7 8 9				•092000	.194506	•160909
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS 1 2	FACTOR •001000	FACT/STER •001910	FACT/STER •000906	FACTOR •067000 •064000	FACT/STER •127960	FACT/STER •069748
3				.064000	.122231	.080045 .080286
5				.052000 .032000	.099312 .061115	.065313 .063267
6 .				.037000	.070665	•074392
7				.042000	.080214	.085251
8 9			• •	•043000	.082124	.089559
10				.009000 .017000	.017189 .032468	.057722 .114999
ii				.014000	.026738	.088317
12			,	.018000	.034377	113131
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT, EGY.
TRAN.FACT. .001000	TRAN. FACT. .000475	NO. FACTOR	TRAN. FACT.	TRAN. FACT. .000885	TRAN. FACT	TRAN. FACT.
Number	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT. .459000	REFL. FACT. .810479	REFL. FACT. .514191	REFL. FACT. Q12012	FACTOR •879808	FACTOR .002000	FACTOR: •538000
		MEAN ENERGY		MEAN ENERGY		
1102.205236		SCAT •TR•NT•		REFL. NT. Q02617		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET .10000000 •70711000 .00001010 2E 671 SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 2 3 .16185702 .02673951 .28485800 .12078350 .18777700 .38560125 .05575021 .42088855 .19738759 . 35219347 1 2 .37564311 .06954516 •50840136 19375368 • 32040309 .08615732 .42417456 .19866542 ·426.08177 .16931236 3 •07784966 .25783979 .34310069 .06572438 •12849217 8 .13684583 .03729531 .10199183 .01953711 .03772684 .01474602 .04272866 .00592442 12 .06708985 .00174873 . . 00208486 18 .00979655 .00225144 24 .00118379 INCHES 7 9 10 .27257152 .47063819 1 2 .37401129 3 .24152147 5 .09993044 .00796636 12 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 1 3 4 .02097968 .00429262 1 .11296736 .07133782 .16884623 .03707518 2 .02849993 .16618608 .08993893 .24476800 .12611413 .03327708 .20872287 3 09508643 ·13292925 .03106304 .15567282 .04918764 .08840649 5 .12290334 8 .07645135 .01721511 .07637402 .01155215 .02640412 .00174873 .04109668 .00584780 .02265748 •00592442 12 .00979655 .00225144 .00208486 18 24 .00118379 INCHES 7 10 6 1 .29251519 2 .25609825 .18366985 3 5 .09284571 8 .00796636 12 18 24 TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TOTAL NO. TTL.FLX/NT. REGION BDS. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. 1.00000000 1.41420712 1.55562783 1.41420712 2.45001416 .78999999 1.29743264 1.23556843 •62649377 2.50895301 2 .65199999 1.09975096 .93215509 .27718460 2.11894229 3 .52499999 .90283563 •69969906 .12303603 1.66894892 .02404152 5 .34299999 •56412057 •40390611 •99697865 8 .13800000 .21737732 .13966162 .00141422 .34277748 12 .04600000 •07727511 .04831454 .13223769 .00700000 .01413285 18 .00846338 .01413285

.00078611

.00118379

.00118379

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•	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE. SET	SLANT MFP 19.531953	
•	INC. ENERGY .100000	COS. THETA .707110	CUTOFF EGY	INC&FLX/NT .1.414207	INC.DSE/NT 1.555628	,
SLAB CONFI	GURATION NE	VADA TEST SIT	E 801L (50%	SATURATED)		
•	DEG	ION THICKNESS	EC /CENTIMETE	:DC 1		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•001000	•000873	•000,516	.090000	.114451	.067630
2				.013000	.018908	.010657
3 4				•144000 •049000	•201426 •085407	.108038 .045809
5				- 083000	•132779	•045809 •085703
6				.125000	.192738	•159447
7				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•172.30	• • • • • • • • • • • • • • • • • • • •
8						•
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10					•	

	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				.079000	.150879	.068336
2				.054000	.103132	.056206
3	.001000	.001910	•000985	.058000	.110772	.061084
4				.065000	.124141	.070644
5				.043000	.082124	.072161
6				.052000	.099312	.088544
7				•037000	.070665	.063535
8				.048000	.091673	.079847
9				.012000	.022918	•070876
10				.012000	.022918	.064050
11 12			.	.015000 .029000	.028648 .055386	.073853 .142406
12				•027000	•037300	*142400
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.001000	.000516	•	•001000	.000873	.000516	
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.504000	.745709	•477284	, Q1 5683	.843155	.002000	•493000
	*	ME'AN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.	•	REFL. NT.		
1102.205236			*	.003112		
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RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. **ENERGY SET** 2E 672 •10000000 .34202000 .00001010 SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 1 3 .29983752 .14183099 .34271752 .02968551 .11628750 .23061201 .07440741 .44735224 .21547627 .36164240 1 .38135172 .09197223 - 37861041 .12870918 .26154366 2 3 .42278859 .08101232 .33513831 .09472443 .17668260 5 .27274294 .03587550 .06409464 .04421403 .18153110 8 .14100013 .00770855 .02622209 .07367014 .01315363 .03355531 .01701666 •01904661 .00291613 .00110620 12 .01534146 .00227855 .00208486 .00118943 18 24 7 10 INCHES 6 8 .45847049 1 .53564851 2 .26878599 3 .13331625 5 .03169213 R .00431348 12 .00109861 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 3 4 1 1 .01588963 .00890150 .14403041 ·10075408 .19164812 .03881812 2 .05583796 .19415259 .08534275 .17820495 •03259949 .07221261 3 .12067028 .16297428 .13885229 5 .14207596 .03116419 ·11021204 .02844777 .06057304 .01107302 R .09223810 .01234621 .04600558 .00770855 .00792765 12 .02443903 .01418233 .00291613 .00110620 18 .00501077 .00227855 .00208486 .00118943 24 INCHES 7 9 10 6 .40032155 1 2 .22965082 3 .12313949 5 .03169213 8 .00431348 12 .00109861 18 24 TOTAL DOSE UNC.NO.FLUX TOTAL NO. TOTAL FLUX TTL.FLX/NT. TRANS./NT. REGION BDS. INCHES TRANS./NT. TRANS./NT. TRANS./NT. 2.92380562 2.92380562 1.00000000 3.21618617 4.25142168 .63199999 1.30572121 .54382784 2.40896668 1 1.40537314 .88141658 .09940940 2 .48999999 •69439560 1.61038259 .39599999 .66799126 .01754281 •48130580 1.26120535 3 .26862058 .24499999 .40416513 .63015035 8 .10900000 .17368494 .11063553 .26606802 .05166994 .03200000 .03273040 .07473952 12

.00658909

.02089430

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	RUN NUMBER 672	HISTORÌES 1000	ENERGY SET	ANGLE SET 0 ¢	SLANT MFP 40.381378	
	INC. ENERGY .100000	COS+ THETA +342020	CUTOFF EGY	INC.FLX/NT 2.923806	INC . DSE/NT 3.216186	•
SLAB CONFI	GURATION NEV	ADA TEST SIT	E SOIL (50%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	. ,
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRÁN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .080000 .018000 .157000 .051000 .132000 .174000	NO.FLX.REFL FACTOR .048509 .010153 .102550 .039773 .117216 .156806	DOSE REFL. FACTOR .028664 .005723 .055004 .021333 .075658 .129721
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3 4 5 6 7 8 9 10 11	NO. TRAN. FACTOR	NO. TRAN.	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .082000 .051000 .068000 .037000 .036000 .037000 .062000 .084000 .017000 .008000 .025000	NO. REFL. FACT/STER .156608 .097403 .129870 .166157 .068755 .070665 .118411 .160428 .032468 .015279 .047746 .105042	DOSE REFL. FACT/STER .034770 .026578 .035613 .043578 .028692 .031722 .050578 .071112 .048648 .021602 .060450 .150369
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .612000	NO. FLUX REFL. FACT. .475007	DOSE REFL. FACT. •316103	ENERGY REFL • FACT • 0.22078	ENERGY ABS. FACTOR .779208	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .388000
1102.205236		MEAN ENERGY SCAT+TR+NT+		MEAN ENERGY REFL. NT. Q03608		,

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET .25000000 1.00000000 .00001010 2E

SCATT	ERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1.	2	3	4	5
ā	13879941	•01688650	•13574501	•07443308	•08755680
1	•19695357	•03737294	•29234985	•14297329	•15677461
2	•31278957	•04925960	• 34373967	•17736708	•18049223
3	•34518025	•06482085	•39374186	•10537962	•16720670
5	•38729302	•08161009	•27984280	•09389021	•11609850
8	•29248801	•02501321	•11272151	•03227656	•03187644
12	•11272978	•01364265	•03864391	•00908118	•01027006
18	•00670483	•00190774	•00626892		.00818653
24			•00155308		
INCHES	6	7	8	9	10
	•06064052	•12667942	•36259242		
1	•14784168	.22219739	•51600245		
2	•16031737	•22136062	•45425103		
3	•11904828	.24243209	.29931795	•	
5	•06749101	•11322203	•12746883		
8	•03196243	•03109767	•04316324		
12	•00103969	•00602299	.01854508		
18	•00323517				
24					
SCATT	ERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	•00291637	-	.03785251	.02574465	•05332893
2	.01600970	•01343462	.07379428	.05288294	.08141787
3	.05523271	.01210784	•12413916	•04769606	.08607484
5	.11671363	.02605092	.13252754	.03342659	.05831514
8	.12204654	•01886072	•07169857	.01269986	.02468980
12	.05183187	.00567180	•01721607	•00753359	•01027006
18	.00272776		.00346823		.00201275
24			.00155308		
		_	_	_	
INCHES	6	7	8	9	10
1	•06047736	•09136925	•24056133		
2	•07268547	•11653008	•26087728		
3	•06670155	•13123755	•21024265		
5	•04147633	•08769777	•10626571		
8	•02453276	•01932072	•03067449		
12	•00103969	•00602299	•00227712		
18	•00118521				
24					•
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.00000000	1.58750000	1.00000000	1.95625003
1	.81499999	1.04125041	1.45321052	•52900001	2.24146577
2	•67599999	•96663224	1.20067049	•27900000	2.17857719
3	•57299999	.88043236	•98191913	•14699999	1.88412761
5	•40599999	•64347362	•60155079	•04100000	1.30791648
8	•20399999	•33052346	•26045009	•00599999	•60659908
12	•06700000	•10186319	•07042033		•20997534
18	.00600000	•00939394	•00646840		•02630319
24	•00100000	•00155308	•00093184		•00155308

	RUN NUMBER 673	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 15.299509	
	1NC. ENERGY .250000	COS. THETA 1.000000	CUTOFF EGY	INC+FLX/NT ,1+000000	INC.DSE/NT 1.700000	,
SLAB CONFI	GURATION NE	ADA TEST SIT	E SOIL (50%	SATURATED)	,	•
		ION THICKNESS				
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7 • 6.200	10.1600	•
	- NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY Groups 1	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .078000	NO.FLX.REFL FACTOR 4138799	DOSE REFL. FACTOR .053070
2	001000		,	.013000	.016886	.006159
. 3	•001000	•001598	•000554	.084000 .037000	•135745 •074433	.047112 .025833
5				.046000	.087557	•036568
6 7				.032000	.060640	.032460
8 9 10				.058000 .186000	•126679 •362592	4089421 •298605
	NUM	BER OF SCATTE	RED NEUTRONS	VS . ANGLE		
ANGULAR	NO. TRÁN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	••			.051.000 .049.000	•194805 •187166	•104725 •113824
3				.039000	.124141	•078774
4				.030000	.095493	.063887
5				•050000	.159155	•109990
· 6				.044000	.140056	•103388
7 8	•001000	•001910	€001059	.035000 .056000	.111408 .106952	.092303
9	•001000	•001910	*001039	.051000	.097403	•105499 •095601
10			•	.047000	.089763	.125367
11				.038000	.072574	.113386
1.2			`	•044000	.021008	.076802
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.001000	•000555		•001000	.001598	•000555	000001
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT. •534000	REFL. FACT. 1.003333	REFL. FACT. •589228	REFL. FACT.	FACTOR •788199	FACTOR .001000	FACTOR •464000
		MEAN ENERGY		MEAN ENERGY		
1702.202618		SCAT.TR.NT. 000291		REFL. NT. 009915		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 9F 674 ·25000000 .86603000 .00001010 SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 2 3 4 1 .11373149 .13032153 .03262701 .14312853 .06187551 .12945716 .24002267 .05820390 .34193007 1 ·19376687 .32106175 .05394205 .35405129 .12274740 •19010836 2 3 .32582292 .06405760 .35935660 .09970178 .16855512 .14848640 .07446619 .09232996 5 .31662295 .25384267 .02306493 8 **19722958** .11543617 .04509311 .02793590 1.2 .10577238 .00833191 .06618722 .01318939 .01669007 18 .00680051 .01210539 24 INCHES 7 10 6 8 9 .04313797 .14226953 .40333347 .23535428 .16673922 .55377217 1 .14373922 .19727840 .39961708 .12597853 .18505425 2 .34473644 .11490383 .04516413 .13495498 8 .01860353 .01510013 .01590224 .00315517 .00250415 .00113823 12 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 1 2 3 4 .00868478 .00105124 .03968639 .01356458 .05498664 2 .03651390 •00943281 .07145727 •05146029 .07618405 .11243851 .04237228 .08190154 3 .07801424 02028608 .13199676 .02626317 ·12108189 .03063112 .08933650 5 8 .11059485 .01497710 .06186202 •02687349 .02279408 .04897958 .00833191 .02396026 .01318939 .01183920 12 .00918947 18 .00531346 24 INCHES 7 10 6 .12018982 .05041931 -28850094 1 2 .05940174 .10609545 .26229068 3 .06841374 ·10829637 .24104991 .07964438 5 .03481005 .07465954 .01419095 .01389179 .01482439 8 .00315517 .00250415 .00113823 12 18 24 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. INCHES TRANS./NT. REGION BDS. TRANS./NT. TRANS./NT. TRANS./NT. 1.15469441 1.00000000 1.83307737 1.15469441 2.20496724 .77799999 1.13018232 1.58397135 .55309861 2.47234497 1 2 .62899999 .93726120 1.16025721 .26442502 2.04697057 .54099999 .97393835 .12586168 1.79912493 3 .87863435 .02886737 5 .36599999 •61729076 .54510875 1.20963847 .17800000 8 .28231806 .20607425 .00230939 .46067499 12 .06800000 .11309788 .07488599 -21696852 .01450294 .00600000 .00909760 .01890590 18

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	RUN NUMBER .	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 17.666258	•
	INC. ENERGY	COS. THETA .866030	CUTOFF EGY	INC.FLX/NT 1.154694	INC.DSE/NT 1.962980	
SLAB CONFI	GURATION NEV	ADA TEST SIT	TE SOIL (50%	SATURATED)		
•	RFG	ION THICKNESS	ES (CENTIMETE	RS1:		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .077000 .016000 .083000 .030000 .059000 .029000 .061000 .196000	NO.FLX.REFL FACTOR .112862 .028256 .123954 .053586 .098495 .037359 .123210 .349299	DOSE REFL. FACTOR .043153 .010305 .043019 .018598 .041136 .019998 .086972 .287658
10	NUM	RER OF SCATTE	RED NEUTRONS	VS. ANGLE		
				•	NO DEEL	DOSE DES
ANGULAR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN- FACT/STER	NO. REFL. FACTOR .086000 .086000 .067000 .077000 .042000 .043000 .056000 .016000 .011000 .017000	NO. REFL. FACT/STER .164247 .152788 .127960 .147059 .080214 .078304 .082124 .106952 .030558 .021008 .028648 .032468	DOSE REFL. FACT/STER .074152 .095448 .076935 .097357 .075211 .084834 .076337 .107059 .105027 .076195 .091848 .091618
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .551000	NO. FLUX REFL. FACT. .927020	DOSE REFL. FACT. .550839	ENERGY REFL • FACT • .022207	ENERGY ABS. FACTOR .777917	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .449000
1702.205236		MEAN ENERGY SCAT .TR.NT.		MEAN ENERGY REFL. NT. Q10076		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY's ENERGY SET 675 .25000000 •70711000 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 2 3 .11355551 .02815852 .14185651 .05999147 .12113749 1 .22753894 •07548252 .32128029 .09183941 .18681878 2 .30555817 .09059903 .29370973 .09744903 .16453326 .34709470 3 .08647364 .37050741 .08218732 .20704013 5 .30149509 .06525367 ·24387822 .05525299 .09331000 8 .18345259 .02028019 .08941696 .03449074 .04681656 12 .06585897 .00614757 .03988820 .02070270 .00710277 18 .00558423 .01351943 .00818653 24 INCHES 6 10 .06712551 .13711400 •43781698 .15574986 .26075120 •61093125 2 .13688426 .22218060 •40042212 3 .09257770 .15804940 ·26487064 5 .05523678 .07402993 .06271227 8 .00852169 .01315326 .02245580 12 .00100344 .00202010 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 1 2 3 5 .00719539 .00295883 .02415224 .02248578 .06955177 2 .02671822 .02632309 .08382357 .04444845 •07760601 3 •07600255 .03446780 ·11380738 .04548992 .09638326 5 .10749108 .03151666 .11688869 . .04184251 .05258621 8 .11180278 .00542412 .05893130 •01971061 .03776239 12 .03293849 .00180675 .01688129 .02070270 ·00569038 18 .00309421 .00904660 .00201275 24 INCHES 7 6 8 9 10 1 .07202539 .12061524 .33183373 2 .05365012 ·14769859 .27693632 3 .05486726 .10198385 .20433208 5 .04854730 .04032338 .05786290 8 .00852169 .00673731 ·01673038 12 .00100344 .00202010 18 24 TOTAL DOSE TOTAL NO. TOTAL FLUX UNC.NO.FLUX TTL.FLX/NT. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 1.41420712 2.24505380 1.41420712 2.48815064 .72799999 1.22498647 1.71718396 .57416809 2.50456034 2 .57299999 •96913436 1.18330120 .23192996 1.94326618 3 .48399999 .82067176 .86352380 .09333766 1.70213862 .31899999 .51261501 •42909599 •01555627 .96672523 8 .15600000 -26562059 -19190845 ·41858778 12 .05100000 .08104315 .05217164 .14272375 18 .00500000 .01415356 .00891601 .02729018

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	RUN NUMBER:	HISTORIES 1000	ENERGY SET	ANGLE SET $ heta\phi$	SLANT MFP 21.636675	
	INC. ENERGY .250000	COS. THETA .707110	CUTOFF EGY	INC.FLX/NT 1.414207	INC.DSE/NT 2.404152	
SLAB CONFI	GURATION NEV	ADA TEST SITE	501L (50% S	ATURATED)		
	956	ION THICKNESS	EC ICENTIMETE	oc)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	. 7,6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	ACTOR	INANGIACION	· ACTON	.071000	•080296	.030702
2			•	.016000	.019911	.007262
3				.085000	.100308	.034813
4				.037000	.042421	.014722
5				.058000	.085658	.035775
6				.033000	.047465	.025408
7				.056000	.096955	.068439
8				.227000	.309585	.254952
9		•		,		
10						
	NUM	BER OF SCATTE	RED NEUTRONS	VS 4 ANGLE		
				•		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 '				.094000	.179526	.069795
2				.085000	.162338	•08 36 68
3				.072000	.137510	.070757
4				.093000	.177616	.097823
5				.042000	.080214	.066024
6				.038.000	.072574	.062064
7				•046000	.087853	.067146
8				.054000	.103132	.079120
9				•006000	.011459	.038531
10				.016000	.030558	.083076
11				.017000	.032468	.084627
12				.020000	.038197	•098958
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.583000	.782598	.472072	024833	.751662		•417000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
1702.205236				010649		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET .25000000 •34202000 95 .00001010 676 SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 1 .16898501 .17407849 .08519351 .12886903 .01499002 .03560940 .26788490 .12266065 .23260457 .20908653 1 .29427047 2 .05516658 .26884405 .11743263 .18643448 .30808189 .06871201 .30508056 .08202146 13952665 3 •17100052 .06219331 .04477214 .07058693 5 .19376086 .12577566 8 .02783513 .08946044 .02282282 .03181204 12 .01069151 .01482140 .01630765 .00109794 .04278967 .00104589 18 .00106590 24 7 INCHES 6 8 9 10 .08250699 .22993650 .60381048 .24794435 1 .11022339 •65719147 2 .11354863 •19288721 34896953 .09312022 .11393756 •16173919 3 5 .05372424 .04931402 .03615658 8 .01446150 .01293231 .00541934 .00198337 .00901121 .00848073 12 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS 2. INCHES 1 3 5 .10155902 .03205183 1 .01150234 .00615573 .05106186 .10124981 .06190646 2 .04603042 .00438023 .08771064 3 .07101901 .02298427 .12343362 .04031065 .08013434 5 .07235683 .02278085 .09781041 .03375532 .05542134 .01501785 8 .04695633 .01270010 .04579525 .02626229 .01676116 .00603609 .00781916 .01320025 .00109794 12 •00104589 .00106590 18 24 7 q 10 INCHES 6 .04935253 .11708872 .45310425 1 .11025785 .27652042 2 .06434188 .09247506 .12464870 3 .06415041 5 .04054720 .03209923 .03232822 8 .01201801 .01026739 .00541934 .00198337 .0080000 .00237484 12 18 24 TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TOTAL NO. TOTAL FLUX INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 2.92380562 2.92380562 4.64154142 4.34980845 1.0000000 .45318987 2.33639513 1 .59099999 1.27506616 1.72655847 .45799999 .82256906 .91507604 .07017134 1.64772491 .62792749 .00877143 1.28099096 3 .36499999 .58901269 .38709940 .68150860 5 .23799999 .30864040 8 .11100000 .17443656 .12428721 .33051925 .05727281 .04049603 .10518348 12 .03300000

.00136234

.00211179

.00211179

18

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	RUN NUMBER 676	HISTORIES 1000	ENERGY SET 2E	ANGLE SET $oldsymbol{ heta}oldsymbol{\phi}$	SLANT MFP 44.732791	
	INC. ENERGY .250000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 4.970469	·
SLAB CONFI	GURATION NE	ADA TEST SI	TE SOIL 150%	SATURATED)		
•	RFG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .064000 .012000 .082000 .049000 .074000 .035000 .083000 .270000	NO.FLX.REFL FACTOR .044076 .005127 .059538 .029138 .057796 .028219 .078643 .206515	DOSE REFL. FACTOR .016853 .001870 .020663 .010112 .024138 .015105 .055513 .170071
10	ALC IM	IRED OF SCATTE	RED NEUTRONS	VS. ANGLE		
	NUM	IDER OF SCALLE	RED NEOTRONS	V34 ANGLL		
ANGULAR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12 (S+U) NO•	NO. TRAN. FACTOR	NO. TRAN. FACT/STER UNSCAT.	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .089000 .078000 .073000 .090000 .050000 .049000 .080000 .024000 .024000 .042000 SCAT.NO.FLX	NO. REFL. FACT/STER .169977 .148969 .139419 .171887 .095493 .095493 .093583 .152788 .038197 .045836 .045836 .080214	DOSE REFL. FACT/STER .035156 .039250 .034248 .043063 .036097 .040622 .036806 .062000 .052547 .062751 .053433 .104343 SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER REFL. FACT.	NO. FLUX REFL. FACT. .509052	DOSE REFL. FACT. .314326	ENERGY REFL. FACT. Q31083	ENERGY ABS. FACTOR .689154	NUMBER ABS. FACTOR .002000	NO. CUTOFF FACTOR .329000
1702.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q11616		

	SCATTERED	FLUX	PER	NEUTRON	ΑT	RE	SION	BDS.	IN	ENERGY GRPS.	
	INCHES	1		2				3		4	5
		.11789	940	•014	229	59	• 1	8114	128	•05865049	• Ø8180599
1		.26814	588	•057	3673	35		6367		•07479854	•16655040
2		.32564	999	• 0.5 9	7438	32	• 3	31155	089	•10856963	•15431355
3		.2865		•053	_			29.271		•10883906	17887458
5		.3387		•043				6290	-	•07658861	•10429034
8		.23549		•038				5792		•05299167	•07232921
12		.10559		•008	064	78		3185		•00945722	•00627807
18		.01594					-	1873		•00118828	•00164051
24		.00322	2090				• 0	0114	126		
	INCHES	6		7				8		9	10
		.05829	332	•061		9	• 0	6111	191	•17335500	•22775561
1		.1022		•138			-	9551		•27049755	•64807180
2		.1501		•207			-	3883		.35810345	•54289470
3		.1189	3952	•197	602	59	• 1	7874	153	.35112863	•44286920
5		.06788	868	•096	0169	92	• 0	9309	709	•13606163	.20748460
8		.05712	2135	•052	9029	92	• 0	4230	140	•06518446	•03390090
12		.01129	911	•009	7388	33	• 0	0343	609	•01067373	• 00207406
18		.0012	3372							•00245542	
24		.00128	3372	•001	060	11					
	SCATTERED	FLUX	TRA	NS. PER	NT.	IN	FGY.	GRP	5-	VS. THICKNESS	
	INCHES	1		2		•,,		3	••	4	5
1		.0026	3067	•002		58	•0	1593	208	•01547832	•04083808
2		.01794		•005				3420		•01919611	•04192072
3		.0296	7148	•012	575	52	• 0	6965	100	.03266787	.05549388
5		.07199	9941	•013	272	39	• 0	8288	274	•03293976	.05213726
8		.06024	4013	•015	5292	23	• 0	7513	145	•03060083	• 04470449
12		.05439	9301	•004	1074	42	• 0	1781	519	•00838376	•00520975
18		.0124	0759				• 0	00877	326	•00118828	•00164051
24	•	.0032	2690				• (0114	726		
	INCHES	4		7				۰		9	10
1		.01674	4410	•034		66	- (8)2353	151	•05967043	•41596388
2		.0284		•063				5377		13519274	• 39370046
3		.0435		•068				9119		•14199512	• 32348606
5		.0369		•068				5315		•07669816	.15974748
8		.0350		•028				3427		•04318590	•03110537
12		.0102	-	•008				0343		•00939236	•00207406
18		.0012	_		. + -					.00245542	
24		.0012	372	•001	060	11					•
	**	TA! A!	•	TOTAL	E	J	TOTA	AL DO	\c E	UNC.NO.FLUX	TTÍ ELVANT
		TAL NO		TOTAL TRANS.				NS./N	-	TRANS./NT.	TTL.FLX/NT. REGION BDS.
		.0000		1.000				0000			1.98371381
1		.84499		1.144				3346		•51700001	2.60212601
2		.7289		1.060				4190		• 26700000	2.62471988
3		.6209		1.006				70161		•13800000	2.34752643
5		.4369		•683				3967	_	•03600000	1.46290145
8		.2499		•403				+2044			-81350276
12		.0850		.123		-		0383			.19846951
18		.0160		.027	748	78	•0	2065	171		.04124327
24	•	.0050	0000	•006	7179	98	•0	0513	454		•00671798

	RUN NUMBER 677	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 15.835284	
	INC. ENERGY	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 2.400000	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E SOIL (50%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1 2	.002000	.003191	•000,864	.071000 .010000	.117899 .014230	.031931 .003676
3 4	•001000	•001120	•000275	.086000 .029000	.181141 .058650	.044530 .014418
5 6	.001000	.001262	•000479	.040000 .032000	.081806 .058293	.024201 .022103
7 8 9	.001000	•001065	•000532	.034000 .028000 .085000	.061095 .061112 .173355	.030548 .035649 .130016
10				.115000	.227756	.208776
	NUM	BER OF SCATTE	RED NEUTRONS	VS . ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS 1	FACTOR	FACT/STER	FACT/STER	FACTOR •046000	FACT/STER •175707	FACT/STER •098628
2	.001000	.003820	.002033	•043000	.164247	•088539
3 4	•001000	•003183	•000876	.052000 .045000	•165521 •143239	.091799 .096898
5	.001000	•003183	•001524	.052000	.165521	.101280
6 7	•001000	.003183	•001162	.033000 .036000	•105042 •114591	.072875 .081803
8			•	•053000	.101222	•080017
9	.001000	.001910	•000954	.040000	.076394	.076695
10				.036000	.068755	.080998
11				•038000	.072574	.102064
12				•056000	.026738	.085585
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT. .005000	TRAN. FACT. .002150	NO. FACTOR	**************************************	TRAN. FACT. .006638	TRAN. FACT. .002150	TRAN. FACT. 000041
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
.530000	REFL. FACT. 1.035338	REFL. FACT. 545848	REFL. FACT. 017975	FACTOR •819830	FACTOR	#ACTOR #465000
		MEAN ENERGY		MEAN ENERGY		
2402.202618		SCAT.TR.NT. 0.04129		REFL. NT. 016958		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 678 .50000000 .86603000 .00001010 2E

SL	AB CONFIG	URATION	NEVAD	A TEST	SITE	SOIL	(50%	84	TURATE)	
		ED FLUX	PER N		AT R	EGION		I.N			_
11	ICHES	1.		2			3			4	5
_		.08892			08354		13768			936602	•10604997
1		•23516			85679		23656			053278	•14132367
2		•32060			94180		26830			355215	•17113472
3 _. 5		•36626			58744		34765			541401	•14468802
		.32632			99107		31884			108146	•11235708
8		•20930			50212		15817			354030	• 04958997
12		.1034			25816		05721			642171	•01347084
18		.01819	5225		04590		01792	221		361854	• 00357403
24				•002	09207				• 00	166644	•00100335
11	NCHES	6		7			8			9	10
		• 05435			96002		08535			339552	•31280701
1		.10208			17198		12065			152812	•68491768
2		.10187			92632		13268			061739	•61577414
3		.06413			70208		08903			420658	•41976836
5		•08596		•091	49355		07918			421778	•16051660
8		•04398	3520	•043	60418	• (03645	121	• 05	511251	• 02767612
12		.00129	9758	•005	47340	• (00491	929	• 00	950898	•00950612
18		•00253	3310	•013	95297	• (01117	202	• 00	214323	
24											•
1.6	SCATTER NCHES	ED FLUX	TRANS	• PER 1	NT. I	N EGY	• GRP 3	S• '		CKNESS 4	5
1	TCHES	.00307	7148		00000		00785	374		217846	•02218093
2		.03089			63721		05112			504984	•04770803
3		.0519			46844		09733			276893	• 05979746
5		.09403			03097		13421			997715	•05501852
8		•08589			14247		07510			701500	•03150445
12		•03983			22510		03169			372004	•01347084
18		•01063			04590		01103			312004	• 00357403
24		•0106	3100		09207		01102	134		166644	•00100335
24				•002	09201				.00	100044	•00100333
I'I	NCHES	6		7			8			9	10
1		•0071	1919	•031	69635	• (01726	743	•11	404585	•44015973
2		•03564	4326	•037	80368	•	05981	747	•12	950793	•43063130
3		•0272	1300	•047	71157	•	04143	190	•17	978255	•29944667
5		•0453	7474	•052	12091	. •	04165	140	•10	146921	•13212206
8		.0258	5640	•027	20449	•	02884	537	•03	231868	•02204319
12		.00129	9758	•005	47340	• 1	00303	225	•00	562453	•00503159
18		.00133	3499	•004	91641				•00	100694	
24											
		TOTAL NO	٥.	TOTAL	FLUX	TOT	AL DO	SE	UNC.N	O.FLUX	TTL.FLX/NT.
11	NCHES	TRANS./		TRANS.			N5./N		TRANS		REGION BDS.
٠,		1.0000		1.154		•	77126			469441	2.18001514
1		.8239		1.202			60706			924230	2.66807066
2		6929		1.113			08512			172339	2.45914557
3		5799			53494		59134			662414	2.20209875
5		4119			41383		90293			540328	1.48138700
8		2099			24232		35218			230939	.67325683
12		.0850			40452		09592				.23051984
18		•0200			54727		02754				•07711425
24		.0030			76186		00295				.00476186
£ 7		10000		1004	. 5100						100410200

•	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 18.284915	
	INC. ENERGY .500000	COS. THETA .866030	CUTOFF EGY .000010	INC.FLX/NT 1.154694	INC.DSE/NT 2.771267	•
SLAB CONFI	GURATION NE	VADA TEST SIT	TE SOIL (50%	SATURATED)		
		ION THICKNESS		•		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	, NUM	IBER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1			****	.057000	.077008	.020856
2	.001000	•001700	•000439	.018000	.027785	.007178
3 4	•001000	•001700	•000418	.079000 .029000	.119238 .060073	.029313
5	•001000	.001700	•000418	•046000	.091842	.014768 .027170
6	•001000	•000000	•000202	•031000	.047073	.027170
7				•028000	.037205	018602
8				.046000	.073918	•043119
ğ.				•079000	132845	.099634
10				.142000	.270900	.248325
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.001000	.001910	.000500	.083000	.158518	.069610
2	•			•070000	.133690	.072890
3				.062000	.118411	•066912
4				.084000	.160428	.096039
5			444704	.048000	.091673	•087776
6	.001000	•001910	•000798	.047000	.089763	.081812
7 8	.001000	.001910	.000838	.045000	.085943	.076415
9				.058000 .012000	.110772 .022918	.112878
10				•011000	•021008	.068891 .058659
11				•017000	.032468	.110715
12			•	.018000	.034377	.103541
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.003000	.001119		•003000	.004284	.001119	800008
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
.555000	REFL. FACT. .937888	REFL. FACT. .526814	REFL. FACT. 020754	FACTOR •792374	FACTOR •001000	FACTOR: _441000
		MEAN ENERGY	-	ME'AN ENERGY	,0 - 0 - 0 - 0	22030
		SCAT .TR.NT.		REFL. NT.		
2402.205236		201358		018697		
Z .021207230		401270		410071		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET .50000000 .70711000 .00001010 2E

	SCATTED	FD FLUY	DER	NEUTRON	A'T	REGION	ADS.	t N	ENERGY	GPDS.	
	INCHES	1		2	71		3	414		4	5
	INCILO	10395	1200	•2384	624	٥ . ١	35049	262		766802	•08633349
1	•	20841		•0505		_	248324			173441	•18011771
2		19595		÷0524		-	259804		-	216167	•15996166
3		-28717		•0555			32631			058663	•08009230
5		.28328		•0535			20856			613648	•06260197
8		.25084		•0295			1943			193847	.03825887
12		.07139		•0235			5516		_	356948	•00546741
18		•02050	349	•0010	458	9 •(00467	860	• 00	169571	
24		•									
	INCHES	6		7			8			9	10
		•09071	999	•0533	160	0 •(5762	100	• 20	984000	•43057951
1		•11607	7478	€1180	585	7 •:	10059	379	• 35	664132	•72207812
2		.11992	2181	•1251	285	8 •:	15284	296	• 30	516502	•54146256
3	,	.13907	7538	•1610	567	4 •(8798	538	• 24	795751	.33969852
5		.06829	704	•0793	167	7 •(7203	565	•17	758052	•10470716
8		.02973		•0251			1400		_	946292	.00977289
12		.00746		*0020			00387			629676	•00217754
18				•0025			0307			406323	70000
24		•00110	7711			•			• • • • • • • • • • • • • • • • • • • •		
•		•••••									
	SCATTER	FD FI UX	TRA	NS. PER N	T.	IN EGY	GRP	S	VS. THI	CKNESS	
	INCHES	1	11171	2			3	•		4	5 '
1	11101100	.00148	222	-		- (2002	744		342895	•03056794
2		.01426		•0057	205		04189			310932	•05669637
3											
		•03109		•0063			08520			122805	•03747832
5		•08740		•0155			08874	-	-	676390	•03675411
. 8		•09920	-	•0116	-		05230		-	238485	•02062784
12	•	.04432		•0034			02421	149	-	910397	•00133259
18		•01006	289	•0010	425	9			• 00	169571	
24											
		_		_						_	• •
	INCHES	6		7			8			9	10
1		.04548		•0371			3303			645777	•46872797
2		.04876	_	•0366			25798			363200	•39865482
3		•08002		•0720			04100			304055	•26517394
5		•04361		•0505			04430			429467	•08315297
8		•02031		•0188			01256			553967	•00977289
12		.00746	5102	•0020	779	6 •(00231	079	• 00	629676	•00217754
18				•0011	277	5			• 00	406323	
24		•00110	711								•
									*		
		TOTÁL NO	•	TOTAL F	LUX	TOTA	AL DO	SE	UNC .N	O.FLUX	TTL.FLX/NT.
	INCHES	TRANS./	NT.	TRANS./	'NT.	TRA	is./N	Τ.	TRANS	•/NT•	REGION BDS.
		1.00000	0000	1.4142	071	2 3.	39409	710	1.41	420712	2.59909307
1		•75099	999	1.2821	184	7 2.	72490	609	• 55	578339	2.73839343
2		.58199	999	1.0151	184	9 1.4	90886	414	• 21	778791	2.19262497
3		49299		.8474			36705			485243	1.88035892
5		.35699		.5938			73008			272786	1.19878134
8		.18700			_		27550				•60825206
12		-06800		•1027			8027				.19102788
18		.01200		•0179		-	1642				•03757631
24		.00100		•0011			00101				•00110711
~ ~		100.100		40011		- · •		0			100110 111

	RUN NUMBER 679	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 22.394372	
	INC. ENERGY	COS. THETA .707110	•000010	INC.FLX/NT 1.414207	INC.DSE/NT 3.394097	
SLAB CONFIC	GURATION NEV	ADÁ TEST SITI	E SOIL (50%.	SATURATED)		•
		ION THICKNESS				
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUMI	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1				.061000	.073507	.019908
2				.013000	.013168	.003402
3				.068000	.095495	.023476
4				.026000	.040778	.010025
5				.048000	.061047	.018060
6	.001000	.000873	.000331	.042000	.064149	.024323
7				.031000	.037700	.018850
8				.035000	•040744	.023767
9				.103000	.148380	.111285
10				.187000	•304467	•279095
	NUM	BER OF SCATTE	RED NEUTRONS	VS . ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				.102000	.194805	.081466
2				.066000	.126050	.059619
3				.086000	.164247	.076415
4	.001000	.001910	•000632	.070000	.133690	.065451
·5				.047000	.089763	.077511
6				.052000	•099312	.080779
7			,	•054000	.103132	.080945
8				•062000	.118411	.101540
9				015000	.028648	.070228
10				•019000	.036287	.093926
11				.024000	.045836	.135431
12				•017000	.032468	.093094
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.001000	.000331		.001000	.000873	.000331	. 0.00014
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.614000	.879435	.532191	026099	.738856	.001000	.384000
		ME'AN ENERGY		MEAN ENERGY		
•		SCAT.TR.NT.		REFL. NT.		
2402.205236		0.07221		021253	•	

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET •50000000 -34202000 680 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 .07076200 .01973302 .09864150 •04596101 .09134854 .10211482 1 ·13257181 •03729401 ·15925025 .06101419 .11445353 2 .21886334 .04986392 .22101779 .07976749 3 .21666257 .03361693 .20417579 .12999696 .08865437 .23797393 .04333126 .13440492 .04019697 .10535394 .02702669 A .15395855 .02262813 .09422523 .02034651 .03434586 .00704057 .00611818 .02053445 .00901172 12 18 .00145837 .00112146 .00281273 .00100620 24 .00108973 .00166644 INCHES 7 A 6 10 .06697501 .09525398 .08953899 .27446800 .77705599 .35751702 .11781852 .13504971 .14843011 .87921235 1 2 -10325964 ·15468600 .09300672 .21945959 .38267626 3 .06766902 .09955298 .06768229 .15089965 .15943705 5 .05774223 .03892424 .04688365 ·06530093 .04911248 .01184050 8 .02388736 .02265042 .02164224 .00129444 12 .00419054 .00757537 .00188704 .00263904 18 .00119958 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 1 2 3 .01706289 1 -00110724 .00136637 .00868077 .00763801 2 .01204813 .00772243 .03687707 .02779347 .04186104 3 .03662192 •01321762 .05236234 .04220044 .06116484 .07796663 5 .07536507 .01189468 .01279953 .04891699 8 .05106255 .01073514 .04357871 .01122359 .01663099 .01954978 •00704057 .01487987 .00254848 12 .00708494 18 .00145837 .00112146 .00281273 .00100620 .00108973 .00166644 24 INCHES 10 .03429262 .05191060 .04105583 .12243999 .57746358 .05310059 2 .06856799 .06067155 .14180607 .28229410 3 •05359864 .05989670 .03962934 .10074709 .15145333 5 .03611561 .02645614 .03314779 .03864788 .03906537 8 .00759601 .02098896 .02164224 .00948629 .00129444 12 .00419054 .00577391 .00263904 18 .00119958 24 TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. TOTAL NO. TOTAL FLUX INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 4.49557146 2.92380562 7.01713350 2.92380562 .59199999 •42395180 2.55422460 1 1.28696972 2.72201992 2 .45199999 .79414237 1.33236995 .06139991 1.69845420 .35899999 .00877143 3 •61966368 .84868086 1.22711903 5 .24699999 •40037569 •41419668 .81922456 .19423893 .16899477 8 .12100000 .39950008

•04800897

.00602155

.00175031

.09334278

.00759834

.00275617

.06370713

.00759834

.00275617

12

18

24

.04100000

.00600000

			. *			
	RUN NUMBER 680	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 46.299293	
	INC. ENERGY	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 7.017133	•
SLAB CONFI	GURATION NE	VADA TEST SIT	E SOIL (50%	SATURATED)		
	REG	ION THICKNESS	SES (CENTIMETE	ERŞ)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	,
	Num	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1 .	.001000	•000349	•000095	.041000	.024202	.006555
2	• • • • • • • • • • • • • • • • • • • •	***************************************	, , , , , , , , , , , , , , , , , , , ,	.009000	.006749	.001743
3				.053000	.033737	008294
4	•001000	•000671	.000165	.029000	.015720	.003864
5				.048000	.031243	.009243
6				.030000	.022907	.008685
7				.037000	.032579	.016289
8				.044000	.030624	.017864
9				•110000	.093874	.070405
10				•311000	.265769	.243621
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.001000	.001910	.000181	•093000	.177616	.038829
2		******	•	.067000	.127960	.029938
3			•	.082000	.156608	•044048
4				.090000	.171887	.047500
5				.054000	.103132	.043495
6	.001000	.001910	.000315	.047000	.089763	.036935
7	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	059000	.112681	.050123
8				.095000	.181436	.085109
9				.015000	.028648	.042340
10				•020000	.038197	.053819
ii				•036000	.068755	.091796
12				.054000	.103132	.174351
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAÑ. FACT.
.002000	•000260		•002000	.001021	.000260	0,00003
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.712000	•557403	.386564	Q38186	.618100		.286000
		MEAN ENERGY	ë ·	MEAN ENERGY		•
		SCAT.TR.NT.		REFL. NT.		
2402.205236		0,00673		Q26816	•	

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 681 1.00000000 1.00000000 .00001010 2D

SCATT	ERED FLUX PER	NEUTRON AT REG	SION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
• • • • • • • • • • • • • • • • • • • •	•10021009	•12712040	.05812459	•03925908	•04563781
1	•19031844	•24730941	•10972965	•06035707	.08214135
2	•22076326	•21489471	•09412558	•07295491	• 06554032
3	26748931.	•29780770	•10050106	•08175377	•09119352
5	•21280925	•26987952	•10643545	•07561699	•11006375
8	•21231880	•14109872	•06281042	•02457543	•02470912
12	•09064515	•05665309	•00652517	•00958234	. •00858483
18	•01215874	•01188813	•00826023		•00111286
24	•00362121	•00118287	•00141331		•00104923
INCHES	6	7	8.	9	10
	•02753059	•07416151	•06054190	•15558629	•60317652
1	•05214995	•10471522	•09124229	• 26444469	•72952066
2	.06727905	.12614174	•08645800	.29444993	•58115824
3	.06985336	.11150504	·10801207	.25955495	.43694925
5	.04688897	•07691192	•06850220	•22107400	.20147948
8	•02127035	•04582935	•02290094	•09269814	• 04963442
12	•00629655	•01667968	·00753386	•02049159	.00541630
18				•00314881	•
24	•00179610			•00125490	
SCATT	ERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	,
INCHES	1	2	3	4	5
1	•00309961	•01-107189	•02215370	•00469758	•02714727
2	•00553072	.03787323	•01332670	.01255248	.03042903
3	.01885104	•04719263	.03761167	.02871103	.03816993
5	.03471219	.08149031	.04274251	.02405212	.04974494
8	•07430060	.06269730	•02848634	•01604205	•01526587
12 .	•04214029	•03422091	•00652517	•00811846	•00537106
18	•00290512	•00990375	•00826023		•00111286
24	•00362121	•00118287	•00141331		•00104923
INCHES	4	7	8	9	10
1 Inches	6 •008 65988	•02329716	•02742383	•06221257	•34222680
2	.03742648	•05217844	•04308208	•12072973	• 34615023
3	.02354293	•04255733	•02945069	•12520401	•30365388
5	•01545381	•03140982	.03756213	•11177103	•14000720
8	.01062069	•03008312	.01604289	•06175516	.04314962
12	.00346723	•01298695	•00607925	•01730637	.00541630
18				•00314881	
24	•00179610			•00125490	
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
Inches	1.00000000	1.00000000	3.79999999	1.00000000	2.21626598
1	•77899999	1.02599029	3.46480889	•49400000	2.42592874
Ž	63899999	•94327914	2.82977497	• 24400000	2.06776574
3	•53199999	.81494513	2.20431380	•12000000	1.94462004
5	.36599999	•59794605	1.26004023	•02900000	1.41866154
8	.23099999	•36144366	•57333225	•00300000	•70084569
12	•09300000	•14163199	•17375450		.22840855
18	.01800000	•02533076	•02336058		.03656876
24	•00700000	•01031761	•01118309		•01031761

	RUN NUMBER 681	HISTORIES	ENERGY SET	ANGLE SET 2541	SLANT MFP 16.906837	
	INC. ENERGY 1.000000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 3.800000	
SLAB CONFI	GURATION NE	MADA TEST SITE	E SOIL (50% S	ATURATED)		•
	REG	ION THICKNESS	ES (CENTIMETE	(RS,)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400					
;	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•002000	.003624	.000610	•063000	.100210	.016877
2	.001000	.001187	.000184	.066000	•127120	•019737
3	.001000	.001445	.000270	.028000	.058125	.010860
4				.020000	•0392 59	.009401
5	.001000	.001065	.000336	.025000	.045638	.014412
6	.001000	.001843	•000679	.016000	•027531	.010143
7	•			.044000	.074161	.035129
8				•026000	.060542	.035051
9	•001000	.001262	•000930	.078000	.155586	.114642
10				.281000	.603176	•539684
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				.065000	.248281	.133014
2	.001000	.003820	.001284	.046000	.175707	.107611
3		***		.061000	.194169	.127391
4	.001000	.003183	.000586	.068000	.216450	.156645
5	.001000	.003183	.002960	.046000	.146422	.100305
6				.039000	.124141	.094920
7	.002000	.006366	.001634	.034000	.108225	.089970
8		_	_	.065000	.124141	.123693
9	.001000	.001910	.001297	•056000	.106952	.120245
10	.001000	.001910	•000701	.044000	.084034	.118128
11				•050000	.095493	•169165
12				.073000	.034855	.136535
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•007000	.003010		•007000	.010426	.003010	0,00095
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FÁCTOR	FACTOR
.647000	1.291349	.805938	031697	•682069	.001000	.345000
		MEAN ENERGY	•	MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
3803.402618		Q13624		0,48990		•

INC.ENERGY COS. THETA RUN NUMBER CUTOFF EGY. **ENERGY SET** 682 1.00000000 2D .86603000 .00001010 SLAB CONFIGURATION NEVADA TEST SITE SOIL (50% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 2 .09434747 .10214604 .06363603 .03154000 .03155052 •11123962 .08911536 .16974028 .16813628 1 •06102803 2 .21012377 .20463109 •09658221 .03633142 ·06859564 3 .28098406 -24340075 •09209599 •06945977 .05581620 .08556987 .21574330 .22357391 .07866920 5 .05768183 .12990555 .03816765 8 .23526117 .03546269 .03583653 .04946573 12 .09715926 .00559020 •00735623 .00708038 18 .01697377 .02190637 .00940378 .01217292 24 .00341291 .00105689 INCHES ٥ 8 10 .03185001 •07835000 .03973802 .16046904 .60801700 •29239930 .06266079 .08367277 .07312476 .84983414 .06370802 .09656930 2 •07556602 •29478366 .62667202 3 .06747376 .09407349 .10187767 .26412073 .35755730 .04524454 .08202947 5 •06043511 .15233415 .19622288 .01245572 ·02953138 .02582441 A •05818164 .03318789 12 .00451302 .01767958 •00833585 .01847259 .00645427 .00737360 .00102192 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 1 2 3 4. .00692873 .02789400 .00865609 .00629445 .00781499 2 .00919805 .02118988 .01106758 .01666261 .02355630 3 .01994863 .03880469 .03091807 .01288980 .02669233 5 .04070004 .06618603 .03355584 .01482561 .04123715 8 .07794681 .06615348 .02463970 .01879371 .02033584 .04226470 .00186784 .02527390 .00559020 .00461504 12 .01319889 .00523563 18 .01113676 .00341291 .00105689 9 INCHES 6 7 A 10 .01966617 .01414844 •01559512 •07719754 .43985394 2 .02555404 .03901378 •01613240 •13213030 •37620509 .02655635 .03347649 .04410604 .14054706 .26073691 3 .02564282 .08494527 .02349693 .03081609 14366023 .01021750 .04684205 .02858977 8 .00666537 .02148727 .00294425 .01441081 .00445140 •01150023 .00645427 1.2 .00102192 18 .00234967 24 UNC.NO.FLUX TTL.FLX/NT. TOTAL FLUX TOTAL DOSE TOTAL NO. TRANS./NT. TRANS./NT. REGION BDS. INCHES TRANS./NT. TRANS./NT. 1.0000000 1.15469441 4.38783875 1.15469441 2.36899308 .72999999 1.13557909 3.87207911 +51152963 2.47248096

2.77958528

1.99013334

1.11633478

•44975977

.14642561

.02542885

.00270686

.22632011

.10045842

.01962981

.00115470

1.99988326

1.72731814

1.21713406

.63496932

.22210712

.06885235

.00446980

.89703015

.73513478

.52469581

-32282619

.11937265

.03294286

.00446980

2

3

5

12

18

.56999999

.46699999

.32699999

.19200000

.07300000

.01900000

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 19.522230	
	.INC. ENERGY 1.000000	COS. THETA .866030	CUTOFF EGY •000010	1NC.FLX/NT '1.154694	INC.DSE/NT 4.387839	,
SLAB CONFI	GURATION N	EVADA TEST S	SITE SOIL (509	SATURATED)		
4		ION THICKNESS	ES (CENTIMETE	R51		,
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200,	10.1600	
f	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•002000	.002768	•000466	. 056000	.081708	.013761
2 .	.001000	.000885	.000137	•062000	.088461	.013735
3				030000	•055111	•010297
4				•02000 0	.027315	•006541
5				•019000	•027324	.008628
6				•020000	.027583	.010162
, 7				•040000	.067853	.032141
8				•021000	.034414	.019924
9			•	•088000	.138971	.102400
10				•310000	.526561	•471133
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE .		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•001000	•001910	•000262	.096000	.183346	.094917
2	•			.102000	.194805	.123251
3	.001000	.001910	•000344	.089000	.169977	.113760
4				.084000	.160428	.114673
5				•059000	.112681	.118221
6				.080000	.152788	.165048
7	.001000	.001910	•000547	.062000	.118411	.117478
8				•037000	.070665	•079432
9				•020000	.038197	.148166
10				•015000	.028648	.094693
11			,	.011000	.021008	.064390
12				•011000	.021008	.081331
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•003000	•000604		•003000	.003653	.000604	•
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•666000	1.075301	. 688723	034448	•655504	.001000	•330000
		MEAN ENERGY		MEAN ENERGY		
1802 (0520)		SCAT.TR.NT.		REFL. NT.	•	
3803.405236		0,001.03		0,51724		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 1.000000000 .70711000 .00001010 2D

	SCATTER	FD FILIX	DFR	NEUTRON	AT RI	GION	BDS.	IN	ENERGY GRPS.	
	INCHES	. 1		2	7' '''		3	* 14	4	5
	***************************************	.09685	351	•1219	3601	•)5288	253	•04399400	.05481752
1	,	.17023	3582	•1853	3145	•1	7459	218	.06692585	.07733171
2	2	.25084	495	•3032	27621	•	13230	350	•05471674	•10305263
3		.19629	786	•2678	36304	•	12966	062	•06305591	• 08686824
5	5	.28240	301	• 2004	2688	•	7906	393	•04387064	•04735881
8	3	.24089	401	•1904	9177	•	04299	776	•00909001	•02717238
12	2	•07610)534	.0510	1284	•	00954	391	•00245690	•00740352
18		•02778	359	•0123		•	00213	151		•00118582
24	•			•0017	73105					
	INCHES			. 7					9	10 %
	INCHES	6 •02801	6603	•1.024	.0748		8 03892:	001	-	10
1	1	•06662		•0932			7861		•21754602 •33272550	•62415853 •87612775
2		•06744		•0879			10114		•32102993	•63237536
3		•04607		•0853			06273			•40500931
5		•04868			6689		3334		•18057546	•13600650
8		•03430			31290		02201		•05140861	•03874792
12		.01732	-	•0178			00422		•01464655	•00103951
18		•00337	-	•0038		•	JU L		101404033	40010002
24			240	1005	,4010					
_	-									
	SCATTER		TRAN		IT. 1	N EGY	GRP:	S. 1	VS. THICKNESS	
_	INCHES	1		2			3		4	5
1		•00238			5736		1033		•00834745	•01943827
2		.01313		•0379			2864		•01838167	•02977789
3		•03273	_	-	73674		05687	-	•01658465	•04312173
5		•06776		•0748			3858		•01272269	•02675867
. 8		•07207	-	•0723			02260		•00780750	•01909286
12		• 03995		•0326		• 1	00550	300	•00245690	•00597301
18		•01442	(177		23148					•00118582
24	•			•00 t	731.05					
	INCHES	6		7			8.		9	10
1		•01669	7755	•0213	8467		2655	598	•10292724	•47612315
2		•02529		•0327			3613		.13815804	.40281245
3		.01604			2195		3106		.13337433	.29444103
5		.01964		-	2940		01668	-	•10928695	•10833875
8	3	.01296	802	•0306	1075	• (01313	005	.03450444	.02344348
12	2			•0078	8744	• 1	00315	685	•01464655	•00103951
18	3			•0038	34810					
24	•									-
									•	
		****		TOTAL S		704	N 20	c E	UNC NO CLU	TT: 5: 41.5
		TOTAL NO		TOTAL F			AL DO		UNC.NO.FLUX	TTL.FLX/NT.
	INCHES	TRANS./N		TRANS.			15./N		TRANS./NT.	REGION BDS.
,	1	1.00000		1.4142			37398 14682		1.41420712	2.72700189
1 2		•70099 •54899		1.2198			31048:		•52184244 •19233217	2•54364658 2•24644001
3	i L	• 45099		•7856			98495		•07071035	1.69414028
5		• 31499		• 520		_	00567		•00848523	1.09414028
8		•19000		•3086			41612		• 00040723	•70392881
12		•07000		•1134			12177			•20165916
18		•01500		•0256			2054	-		•05064525
24		.00100		•0017			00103			•00173105
						-	J			

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 23.909770	
	INC. ENERGY 1.000000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 5.373987	
SLAB CONFI	GURATION NE	VADA TEST S	SITE SOIL (50	% SATURATED!		•
2.5400 15.2400	REG 2.5400 15.2400	ION THICKNESS 2.5400	ES (CENTIMETE 5.0800	(RS.) 7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .055000	NO.FLX.REFL FACTOR .068486	DOSE REFL. FACTOR .011534
2		.001388	•000215	.060000 .025000 .021000	.086222 .037394 .031109	.013387 .006987 .007450
5 6 7	, ·			.028000 .018000 .046000	.038762 .019810 .072413	.012241 .007299 .034301
8 9 10				.020000 .104000 .309000	.027527 .153829 .441349	.015937 .113348 .394891
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .104000 .095000 .100000	NO. REFL. FACT/STER .198625. .181436 .190985	DOSE REFL. FACT/STER .080505 .095240 .108247
4 5 6 7 8	•001000	•001910	•000411	.078000 .063000 .079000 .047000 .036000	.148969 .120321 .150879 .089763 .068755 .053476	.078180 .116112 .145788 .082446 .054589 .159257
10 11 12			•	.021000 .016000 .019000	.040107 .030558 .036287	.086481 .084358 .087890
(S+U) NO. TRAN.FACT. .001000	(S+U) DOSE TRAN. FACT. .000216	UNSCAT.	SCAT. NO. TRAN. FACT. .001000	SCAT.NO.FLX TRAN. FACT. .001388	SCAT. DOSE TRAN. FACT. .000216	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .686000	NO. FLUX REFL. FACT. .976901	DOSE REFL. FÀCT. .617374	ENERGY REFL. FACT. Q35900	ENERGY ABS. FACTOR .640988	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .312000
3803.405236		MEAN ENERGY SCAT.TR.NT. Q00127		MEAN ENERGY REFL NT Q52332	+ ;	.´

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 1.000000000 .34202000 .00001010 2D

	SCATTERE	D FLUX	PER	NEUTRON	ΑT	REGI	ON E	BDS.	IN	ENERGY GRPS.	
	INCHES	1		2				3		4	5
		.06589	9602	•0872	090	1	•08	1192	901	•04758802	•06200902
1	•	.1112	2239	•1760	136	1	•09	274	122	•05972721	•11609938
2		.16210	129	•1810	792	4	• 08	3057	103	•06587057	•09129183
3		.1660	3968	•2475	770	3	• 08	5214	465	.04783217	• 09275423
5		.1929	3012	•2046	989	3		335		.03458252	•04565068
8		.1318		•1.177				208		.00861785	•02542091
12		.0397		•0231				656	-	•00312010	.00449661
18		.0282	_	•0123	-	-	•••	,0,0		•00608098	•00177966
24		.0028		•		•					***************************************
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
	INCHES	6		7				8		9	10
		.0510	2750	•0774	985	2	•07	7056	200	•30913450	.85988249
1		.0685		•1189				363		•36813992	•81737667
Ž		.0558		•1150				856		•33400477	•41857605
3		.0904		•0939				663		24389420	•21309103
5		.0337		•0447				3992		•09629357	•06844337
8		.0202		•0307	-		-	276		•03984735	•01476464
12		•0046		•0062				003		•00491388	•00521231
		.0014					•01	.005.	J 1 7		• 00 32 1 2 3 1
18		*0014	9111	•0012	200	,				.00133343	
24											
	SCATTERE	D EL LIV	TOAL	NS. PER N	IT .	IN E	GV -	CDD	c . (VS. THIČKNESS	
	INCHES	1	IRAI	13 PER 1	• •	THE	01.	3	J•	4 4	5.
1		•0042	7402	•0140	1216	.1	-00	5 679	082	-	•02988296
		.0184		•0438				105			
2		.0236		•0559				2237		•01868737	•03202235 •02782991
5		•0575		•0836		-		2970		•01660792	•02026654
. 8		•0685		•0602				687		•00317258	•00829998
12		•0266		•0196	_		• 00	486	391	•00200186	40177044
18		.0089		•0102	128	. /				•00474133	•00177966
24		.0028	0875								
				_				_		•	• •
	INCHES	6	. .	7		_		8		9	10
1		.0234		•0293				256		•17858965	•59285439
2		.0153		•0461				879		•21517013	•33218924
3		.0379		•0297				3547		•16594450	•17242622
5		.0106		•0247				746		•07051401	•05989392
8		.0081		•0149				569		•03686210	•01476464
12		•0046	3300	•0027			•00	694	557	•00491388	•00360516
18				•0012	2380	3				•00133343	
24											
			_								
		OTAL N		TOTAL F			-	. DO	_	UNC.NO.FLUX	TTL.FLX/NT.
		RANS ./		TRANS.				./N		TRANS./NT.	REGION BDS.
		1.0000		2.9238				046		2.92380562	4.56098888
1		.5439		1.2906				523			2.36334506
2		.4179		-8064				1409		•04678087	1.63973461
3		.3339		•5958				3562		•00584760	1.38327182
5		.2339		•3910			_	+677			•82439063
8		.1310		•2375		-		10:12			• 43395063
12		.0510		•0760)594	8	•08	3661	972		•10808775
18		.0170		•0282		-		2489			• 05255494
24		.0020	0000	•0026	3087	5	•00	173	269		•00280875

	RUN NUMBER .	HISTORIES 1000	ENERGY SET	ANGLE SET ₽ф	SLANT MFP 49.432305	•
	INC. ENERGY 1.000000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 11.110461	
SLAB CONFI	GURATION NEVA	ADA TEST SITE	SOIL (50% SATUR	RATED)		
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	,
	NUM	IBER OF SCATTE	RED NEUTRONS	VS. ENERGY		,
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.002000	.001093	.000184	.039000	.022538	.003796
2				.053000	.029827	.004631
3				.038000	.028021	.005236
4	•			•025000	•016276	.003898
5				•034000	.021208	.006697
6				•026000	•017446	.006427
7				.035000	.026506	.012555
8 9				•033000	.024134	.013972
10				•130000	•105730	•077906
1.0				•341000	•294097	.263139
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	. •	•*
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	ACT/STER
1				.085000	.162338	.032832
2				.087000	.166157	.043457
3	.001000	.001910	.000136	.086000	.164247	.042006
4				.081000	•154698	.036061
5			_	.068000	.129870	.058162
6	.001000	.001910	•000216	.079000	.150879	.074955
7'				•054000	.103132	.036700
8				•088000	.168067	.075549
9				•036000	•068755	.111052
10				•025000	.047746	.078332
11 12			•	•027000	.051.566	.068337
12				•038000	•072574	.103172
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAÑ. FACT.
•002000	.000184		•002000	.001093	.000184	
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•754000	•585783	•398258	Q41785	•582140		-244000
		MEAN ENERGY		MEAN ENERGY		
	•	SCAT.TR.NT.		REFL. NT.		•
3803.405236		0.0002.7		055417		•

RUN NUMBER 1NC-ENERGY COS. THETA CUTOFF EGY: ENERGY SET 2-00000000 1.00000000 -00001010 20

	SCATTERE	D FLUX	PER	NEUTRON	AT	REGI	ON	BD.\$ •	IN	ENERGY GRPS.		
	INCHES	1		2				3:		. 4	. 5	
		.0835	2999	•0786	5123	32	• 0	52:56	472	•04302106	• 04620468	
1		•1362	9841	•183	7556	8	• 1	2863	650	>	08332813	•
2		• 2049	6044	•1854	-	-	• 1	7189	884	•10273826	•09321651	
3		.1868		• 2556				7072		•15399447	•08470350	
5		• 2355		•253			_	7779		•14434764	•07506099	
8		•2933		•196	-			3713		•09588564	•10436602	
12		•2119		•1824				6386	-	•04541410	.06349266	
18		•0714		•0569				3573		•01182194	•01461968	
24	•	• 00 3.4	82.78	•0026	5/48	13	•0	0407	114	•00133930		
	INCHES	6		7				8		9.	10	
		•0196	8338	•057	1415	51	•0	5027	880	•10522810	.37420888	
1		•0445	4782	•1013	3249	4	• 1	0664	539	•19183765	•53831740	
2		•0404	1744	•122	2819	7	•0	9888	246	•29210084	•49081792	
3		.0684	6720	•110	690	3	•1	3913	867	• 29297736	•44716430	
5	1	.0643	9785	•1374	935	54	• 1	0764	827	• 24694851	•39291989	
8	1	.0578	8836	•128	1551	9	•0	8672	227	•18621914	•21755933	
12	!	•0174	5018	•068	7420	7	• 0	3924	311	•09865091	.09492768	
18	l .	•0013	3058	•0139	9470)6	•0	0880	364	•02880264	•01354865	
24	•			•0080	714	+4	•0	0177	930	•00487901	•00235582	
	SCATTERE	D FLUX	TRA	NS. PER I	uT.	IN E	GY.	GRP	S	VS. THICKNESS		
	INCHES	1		2	• • •			3	•	4	5	
1		_		•004	1689	90	•0	2309	302	•00952191	•01549380	
2	1	•0043	1168	•030	3471	6	•0	2170	364	•02091258	.01569087	
3		.0079	9495	•027	3759	96	•0	3583	677	•03324059	.01270626	
5	,	.0301	6728	•0566	5956	8	• 0	3030	358	•02874532	•01217560	
8	1	•0552	1480	•0524	+094	•6	•0	5407	141	•02753674	.02961404	
12		•0736	0288	•053	7038	32	•0	3311	220	•01879609	• 02554019	
18		.0317	0108	•0216	5221	12	• 0	1667	685	•00941075	•00578680	
24	•	•0034	8278	•0026	5748	33	•0	0407	114	•00133930		
	INCHES	6		7				8		9	10	
1		•0016	25:25	•0186	.728	2 1	۰.	0936	415	•03860160	•17566477	
2		•0070		•0260				1717		•09286477	• 23443148	
3		•0246		•024				3850		•10430031	• 22317444	
5		.0169		•037				3458		•08872894	23213225	
8		.0166		.034		_	-	2455		•09313262	•15648596	
12		.0064	-	•035		-	_	1362		•04893735	•06926060	
18		.0013		•0119			-	0644		•01728908	•00982502	
24				•008	-			0177		* 20487901	• 00235582	•
			_	TOTAL 1		, .		. 50		UNC NO FLUY	*** F1 V /N*	
		TOTAL NO		TOTAL I				L DO S•/N		UNC.NO.FLUX TRANS./NT.	TTL.FLX/NT. REGION BDS.	
	AMERICA	1.0000		1.0000				9230		1.00000000	1.84893021	
1		•9000		1.050				7275		• 75399999	2.35056532	
2		8079	-	1.0384				2579		656800000	2.37073128	
3		.7319		•960				6146	-		2.33823171	
5		6039		•811	_			6807		•24299999	2.07841744	
é		•4369		•6484				8514		10399999	1.60738859	
12		.2499		•4114				5799		•03300000	•91916528	
18		.0880		138				6452		•00599999	•26297317	
24		.0220		.029			-	7205		•00100001	•02965362	
_ ~						-		~ ,		10010001	102707702	

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MEP 6.791567	
	INC. ENERGY 2.000000	COS. THETA 1.000000	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT 4.100000	
SLAB CONFI	GURATION NEV	ADA TEST SITE S	BOIL (50% SATU	RATÊD)		
		ION THICKNESS		· ·		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	, NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003000	.003426	.000535		.083530	.013039
2	.002000	.002784	.000401	.050000	.078612	.011313
3	.002000	.004108	000812	.032000	.052565	.010385
4	.001000	.001347	.000427	.025000	.043021	.013641
5	•,	******	*****	.024000	.046205	.020285
6				.011000	.019683	.01.0562
7	•006000	.008181	.005587	.028000	.057141	.039023
8	.001000	.001843	.001529	.029000	.050279	.041695
9	.004000	.004882	.004644	.054000	.105228	.100095
10	.002000	.002358	.002358	.185000	.374209	.374209
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	•	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.003000	.011459	.010168	.047000	.179526	.107455
Ž		••••	• • • • • • • • • • • • • • • • • • • •	.033000	.126050	.088925
3	.003000	.009549	.003547	•047000	.149605	100752
4	•002000	.006366	.001133	.043000	136873	.100551
Š	.003000	•009549	.010387	.048000	.152788	.125097
6	.004000	.012732	.012657	.033000	.105042	.09.2337
7	.001000	.003183	.000909	.038000	120957	.118170
8	•002000	•003820	•002523	.055000	105042	.111413
9	•002000	.003820	•005324	.038000	072574	.087093
10	•002000	*003620	*003324	•037000	•070665	107465
11	001000	001010	.001005	•029000	.055386	116461
12	.001000	.001910	•001005	•042000	020053	.092138
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT . DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•022000	017292	•001000	.021000	.028932	•016292	000696
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•490000	.910473	.634246	0,22003	•772001	.001000	.487000
		MEAN ENERGY		MEAN ENERGY	•	•
		SCAT.TR.NT.		REFL. NT.		
4104.102618		Q66265	•	0,89810	•	*

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 2.000000000. .86603000 .00001010 2C

SCATT	ERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
	•05954549	•11489152	•04634501	•05260454	.05207350
1	•14420648	•17931654	•10231450	•06975755	•09553972
2	•22886317	•29264267	•17414525	•10449850	•08600436
3	•22420658	•21575446	•13884141	•15723442	•08743120
5	•31444800	•24093109 ⁻	•16481426	•14623570	•08743556
8	•23157477	•19534461	•09270359	•06640396	•08193159
12	•22555152	•14867019	•09267063	•07252020	•02410340
18	•07120233	·•04049482	•02487281	•03147564	•01751076
24	•00689271	•01183114	•00103437	•00420332	•00108228
INCHES	6	7	8	9	10
	.02197803	•04682151	•05513803	.12944251	•37977350
1	.04893824	.07418692	•11299123	.25024437	•53850223
2	.05478134	•10323348	.14857410	•25170083	•58562961
3	.04434684	•11294271	•10336950	•28832897	•50048192
5	•03051272	•10566089	•08889753	.26236190	.38912151
8	.04673478	•10349058	•04320047	•14681882	.20774681
12	•01896497	•06043727	•03697643	•07556671	.08798143
18	•00963105	•00895312	•02115303	•02047564	•03179557
24	•00120499	•00104167	•00166327	•00433712	.00862837
					•
	ERED FLUX TRAN		EGY. GRPS. V		_
INCHES	1	2	3	4	5
1	•00134161	•00396146	•00174587	•01013810	•00834216.
2	•00337699	•02011537	•04054578	•01638018	•02972398
3	•01390965	•02369073	•02726209	•03293052	•03548949
5	.01833713	•04332646	•02729958	•04506600	•03392374
8 ·	•05358184	•04126660	•03451358	•02877771	•03792518
12 18	•04775285 •02551284	•05051318 •01291096	•02497769 •00727167	•03121919 •01832598	•00835845 •00789013
24	•02551284	•01291096	•00103437	•00420332	•00108228
24	*00007271	*01103114	*00103431	*00420332	•00100220
INCHES	6	7	8	9	10
1	.01304388	·01112949	.02844577	•05379837	•22765200
2	•01183005	•03013895	.03196417	•07405651	.29322996
3	.01064611	•04440467	.03100115	•10084489	•32110461
5	•01317244	•05928090	•03027021	•10304784	•26547380
8	•01240036	•05365094	•02:276814	•08349263	•15261931
12	.00849218	•04373556	•02220205	•04734811	•07165483
18	•00505957	•00537264	•00806083	•01149956	• 02953704
24	•00120499	•00104167	•00166327	•00433712	•00862837
	TOTAL NO	TOTAL CLUV	TOTAL DOCE	UNC.NO.FLUX	TTI ELVINT
INCHES	TOTAL NO. Trans./NT.	TOTAL FLUX TRANS./NT.	TOTAL DOSE	TRANS./NT.	TTL.FLX/NT. REGION BDS.
INCHES		1.15469441	4.95630370	1.15469441	2.07349276
1	1.00000000 .89300000	1.19213337	4.93510157	•83253467	2.44853246
	•801'99999	1.15180304	4.44665871	•60044109	2.63051442
2 3	•70999999	1.07429433	4.00533531	•43301040	2.30594843
5	• 56699999	•86436353	2.96102738	•22516540	2.05558457
· 8	•40699999	•60528897	1.77096161	•08429268	1.30024268
12	•22999999	•37819329	•93210171	•02193919	•86538194
18	•08500000	•13375061	30244299	•00230939	•27987416
24	•02400000	•04191924	•08292809		•04191924
• .		*V"******	,,,,,,,,,,		*******

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP	
	686	1000	2C	$\theta \phi$	7.842184	
	INC. ENERGY 2.000000	COS. THETA .866030	CUTOFF EGY	INC.FLX/NT 1.154694	INC . DSE /NT	·
SLAB CONFI	GURATION NEVA	DA TEST SITE S	OIL (50% SATUR	ATED)		V
•	PFG	ION THICKNESS	ES (CENTIMETE	·R<)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	·
	Num	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•005000	•005790	•000904	•039000	051568	•008050
2	.003000	.007891	.001135	• 059000	.099499	.014318
3	.001000	.000885	.000175	.030000	.040136	.007929
4	.002000	.006191	.001963	.030000	.045557	.014445
5	.001000	.000885	.000388	.024000	.045097	.019799
6	.001000	.001069	.000573	.012000	.019034	.010213
7	.001000	.000885	•000604	.028000	•040549	•027692
8	.001000	.001700	•001409	•027000	.047751	.039599
9	•003000	.003837	.003650	.074000	.112101	.106633
10	•006000	.007306	•007306	.186000	.328895	.328895
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.006000	.011459	•005872	•076000	.145149	.077686
2				•077000	•147059	.100802
3	.006000	.011459	•007756	.069000	.131780	•099936
4	.004000	.007639	.003201	.077000	•147059	.105018
5	.003000	.005730	•006405	.031000	.059205	•073169
6				.053000	•101222	•113229
7				.040000	.076394	.095225
8	.003000	•005730	•006840	.037000	.070665	.085384
9	.001000	.001910	•00,3102	•010000	.019099	.072850
10				.016000	.030558	.115921
11	•001000	•001910	•001408.	.011000	.021008	.086093
12				•012000	•022918	•077766
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCATA NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•024000	.018108		•024000	.036437	.018108	0.00858
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTÒR	FACTOR
.509000	.830188	•577572	023541	•755995	.001000	•466000
•		MEAN ENERGY		MEAN ENERGY REFL. NT.		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 2.00000000 .70711000 .00001010 2C

SCAT	TERED FLUX PER	NEUTRON AT RE	GION BOS. IN	FNERGY GRPS.	
INCHES	1	2	3	4	. 5
	.06024849	•11052451	•05133250	•06102551	•04884951
1	.09630788	.14844186	•11579596	.11904555	.06688772
2 3	•21060395	•14767229	•11976620	•12002776	•07108812
3	.22498153	•22288532	•15395379	•11963448	•12363905
5	.19922952	•18159919	•14739058	•10012922	•11659329
8	•27960517	•20206059	•12207891	•07197839	•06742808
12	•16297367	•11928424	•08615070	•04067293	•03701602
18	•06706954	•04649051	•02125849	•03140821	•01822262
24	•02012676	•00336509	•00267190	•00440830	•00309575
INCHES '	6	7	8	9	10
INCHES	•02130253	•05132799	•07057251	•11600352	10 •46050602
1	•06813762	•12972996	•11697381	•27780294	•64649584
2	•07949137	•16660661	•13347110	•35398133	•59059214
3	•07700470	•11681213	•10497520	•33086806	•44662753
5	.07812398	•14197013	11250243	•24021025	•33747363
8	.02217499	•11365765	•09547780	•15718078	•20300565
12	•00761739	•07347409	•03992675	•05950365	•04930211
18	.00686711	•02602005	•01014353	•01882817	•00539716
24	***************************************	***************************************	•00102303	.00251305	•00132522
•				***************************************	
	TERED FLUX TRAN		EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1		•00384918	•01062976	•01537652	• 00466699
2	•00213109	•01151769	•01370159	•01465986	•01647522
3	.02081903	•01434443	•03461948	•02728976	•02496827
5	•03751116	•04155269	.04494233	•02500140	•04414163
8	•07202597	•07593411	•06173540	•02500227	•03952507
12 ,	.04113057	•05397895	•03699032	•01334064	•01987855
18	•02953139	•02669896	•01038855	•01098249	•01461087
24	.02012676	•00336509	•00267190	•00440830	• 00309575
INCHES	6	7	8	9	10
1	•00583827	•02097185	•02601761	•06658054	•25773862
Ž	.01393942	•04324197	.02469585	•14683196	•31979039
3	.01936121	•04304297	•03092107	•13900296	•29675945
5	.01933625	.05510447	•04603801	•09622334	.24382484
8	.01429236	•05352132	.03594714	•09150414	•14479056
12	.00639264	•04380400	.03110506	•03590115	.04063237
18	.00583657	•01584248	•00537654	.01136415	•00539716
24	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.00102303	.00251305	.00132522
	70741 110	TOTAL FLUM	TOTAL 2005	UNC NO EL	*** ****
THICUES	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
,	1.00000000	1.41420712	6.07021212	1.41420712	2.41979730
1	•85699999 73600000	1.35918813	5.61201580	•94751879	2.73313791
2	•73699999	1.24196405	4.95936388	•63497900	2.62827986
3	•64199999 53690099	1.07680498	4.02190978	•42567634	2 • 34705815
5 8	•52699999	•84459409 •47084663	2.77110497	•19091795	1.84614018
	•39199999	•67084663	1.75488602	•05656828	1.39121629
12	•21199999	•33446792	•73626883	•01131367	•68723522
18 24	•07800000	•13602915	•22747217 •04755774		• 25170539
47	•02700000	•03852910	•0+133114		•03852910

	RUN NUMBER 687	HISTORIES 1000	ENERGY SET	ANGLE SET $\theta \phi$	SLANT MFP 9.604682	
	INC. ENERGY 2.000000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 5.798249	
SLAB CONFI	GURATION NEVE	DA TEST SITE S	SOIL (50% SATU	RATED)		
	REG	ION THICKNESS	ES (CENTIMETE	(RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NÜM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.012000	.014875	•002322	•034000	.042602	.006650
2	.003000	.002467	•0003 5 5	.058000	.078153	.011246
3	.002000	.001745	•000345	.032000	.036298	.007171
4.	.004000	.003039	•000964	.030000	.043152	•013682
5	.002000	.002775	.001218	•024000	.034542	.015165
6				•015000	•015063	.008083
7			_	•025000	.036295	.024787
8	.001000	.000722	.000599	.032000	.049903	.041383
9	•002000	.001745	.001660	.064000	.082027	.078026
10	.001000	.000873	•000873	•232000	.325628	.325628
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	.008000	.015279	•003301	.081000	.154698	.072461
2	.006000	.011459	.003215	•064000	.122231	.075407
3	.001000	•001910	•000260	.076000	.145149	.081955
4	•006000	.011459	•004329	.081000	.154698	• 068309
5				.053000	.101222	·01.944.
6	.001000	•001910	•000414	.044000	.084034	.083802
7	•002000	.003820	•001577	.038000	.072574	.078074
8	.002000	.003820	•001577	.054000	.103132	•10 5 405
9				•015000	.028648	115340
10				•018000	•034377	•088940
11				.007000	.013369	.029946
12	•001000	•001910	•001247	•015000	.028648	.086213
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•027000	.008336		•027000	.028243	.008336	0.00340
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•546000	.743663	.531821	027208	.724507	.002000	•425000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
4104.105236		0,25195		0,99664		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 688 2.00000000 .34202000 .00001010 2C

SCATTE	ERED FLUX PER I	NEUTRON AT RE	SION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
	•04928950	•09645602°	•06197104	•97317853	• 06333250
1	•10337605	•12581780	•07105604	•11867565	•08979481
2	•16372198	18445930	•09103250	•19012614	•11707690
3	•231;37888	18363607	•12490189	•16029944	•09344353
5	•17638059	•20882349	•09174224	•11061407	• 07564447
8	•19081341	•14678214	•10787908	•03761674	• 06499062
12	•12662754	•06655428	•02923577	.01683741	•01040412
18	•02696772	•02547610	•00517994	•00595870	•00486459
24	•00330317	•00491601	•00151273		•00133967
INCHES	6	. 7	8	9	. 10
	.03323701	•07876850	•06522503	•16333750	•75942900
1	•05699032	•15672008	•13353389	•29839086	•87817813
2	•06185752	•17366034	•12217779	•31517144	•66123667
3	•05909602	•15618695	•09734761	•20821401	• 54963032
5	.04153982	•12736114	•06811185	•17403618	•23811431
8	•02391604	•12915703	•05251355	.11502174	• 09305402
12	•00310613	•02442822	•01280708	•05126565	•02660917
18		•00575874	•00224757	•00757081	•00343591
24		•00323886		.00118331	•00225335
	ERED FLUX TRAN:		EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	· 3	4	. 5
1		•00107665	•00204,463	•00913776	02077847
2	•00564618	•01717268	•02128927	•03405678	•03274656
3	•02051703	•03178,355	•03091331	•03512547	•03773649
5	.03894927	•05399290	•03896385	•04961471	•03090213
8 .	•05348041	•05816825	•04501554	•01652036	•03205717
12	•05467312	•03440561	•01608368	•01144756	• 00540293
18	.01129188	•01882182	•00217714	•00413630	•00210457
24	•00330317	•00491601	•00151273		•00133967
INCHES	6	7	8	9	10
1	•02779310	04470796.	·0386:1380	•09208598	•50417325
2	•01503923	•05562557	05599853	•12151921	•42898113
3	•01207602	•06791349	•04448404	•10318636	•41157698
5	•02525397	•04951784	•03224461	•10612979	•18109278
8	•00804371	•05834916	•03427688	•05558491	•07761327
12	•00310613	•01472911	•00607093	•02020770	•02348196
18		•00575874	•00101771	•00598021	•00343591
24		•00323886		•00118331	•00225335
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS .: /NT.	REGION BDS.
•	1.00000000	2.92380562	12.54987337	2.92380562	4 • 26837665
1	•74299999	2.01811466	8 • 33773769	1.27770306	3.31023668
2	•58599999	1.34652203	5.20022340	•55844687	2.63896746
3	•49799999	1.03798859	3.70800302	•24267585	2.10681058
5	•37899999	•65051894	1.88109668	•04385710	1.35622525
8	•25999999	•44203348	1.03367509	•00292383	•96466816
12	•130.00000	•18960874	.33781395		• 36787537
18	•03600000	•05472428	•08595490		• 08746008
24	•01200000	•01774711	•03128030		•01774711

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 19.857222	
	INC. ENERGY 2.000000	COS. THETA .342020	CUTOFF EGY .000010	INC.FLX/NT 2.923806	INC.DSE/NT 11.987603	•
SLAB CONFI	GURATION NEVA	NDA TEST SITE E	IOIL (50% SATUR	RATED)		
•	REG	ION THICKNESS	ES (CÉNTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003000	.001121	.000175	•030000	.016858	.002632
2	.002000	.001342	.000193	.053000	.032990	.004747
3	.001000	.000671	.000133	.037000	.021195	.004187
4	À			.045000	.025029	.007916
5	.001000	.000422	.000185	.030000	.021661	.009510
6				.018000	.011368	.006100
7	.002000	.001342	•000917	.040000	.026940	.018398
8				.029000	.022308	.018499
9	.001000	.000422	•000401	.069000	.055865	.053140
10	•002000	.000844	•000844	.305000	.259740	.259740
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.002000	.003820	•000208	•092000	.175707	.043471
2	.003000	.005730	•001927	.070000	.133690	.037942
3	.002000	.003820	•000932	.095000	.181436	.053316
4				•076000	.145149	.040073
5	.001000	•001910	-000184	.054000	.103132	.050683
6	.002000	.003820	.000438	.052000	.099312	.048366
7				.053000	.101222	.051246
8	•002000	.003820	•001751	.058000	.110772	.052346
9				.015000	•0286 48	.053282
10				.027000	.051566	.095359
11				.023000	.043927	.075201
12				.041000	.078304	.133798
(5+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.012000	.002848		-012000	.006165	.002848	0.00312
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
-656G00	.493954	.384889	035032	.646552	.002000	-3300co
		MEAN ENERGY		MEAN ENERGY	•	
		SCAT.TR.NT.		REFL. NT.		•
4104.105236		051947		1,06805		

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 689 3.00000000 1.00000000 .00001010 2B

				ENERGY CRES	
INCHES	RED FLUX PER I	NEUTRON AT RE	3 3	ENERGY GRPS.	5
INCHES	•09140289	•04895661	•03880241	•04560359	•04511770
1 .	.15857679	•11403971	•09740824	•07607150	.07472451
ž	.18108101	•15372551	10808213	•08968230	14954682
3	.19186682	•21042159	•10163051	10217700	•10448202
5 .	•26171158	•21162213	•12015149	•08975955	•09838413
8	•28029068	•17146360	• 11026556	•10426248	•11053839
12	•18219951	•18322754	•12496388	•08029161	•09446850
18	•10754302	•08648552	•04652393	. •01616206	·05581472
24	•02452247	•00818910	•00469634	•00759154	•00713869
		-	_	_	
INCHES	6	7	8' 034.80	9	10
1	•08031328 •14105349	•07662018 •10515721	•04692480 •09461992	•18660199 •21123588	•19036430
2	•14965205	•13816550·	•11840027	•18131948	•25054205 •33994362
3	•17896441	•14401503	•14149462	•23459531	•30021883
5	•21290389	•15457457	•16368633	•20591439	•33286555
š	•21714661	•13479276	•12008780	•16312733	•23452360
12	.12080067	•06446295	•07180836	•09551276	14051278
18	•06796216	03835132	•02404628	•04698658	•04804352
24	•01681560	•00842318	•00561611	•01092644	•01788097
					•
	RED FLUX TRANS		EGY. GRPS. V		
INCHES	1	2	3	4	5
1		•00586104		•00967578	•00510857
2	*******	•01836303	•01361848	•00758361	•01961066
3	•00397766	•02494626	•00696452	•03006943	•00873314
5	•02499725	•03549533	•02537170	•02219258	•02182828
. 8	•04172235	•03343703	•02194137	•01922015	•04319604
12	•03555004 •04132546	•04769577 •02843461	•02366823 •02614971	•02592632 •00382448	•04336631
18 24	•02452247	•00818910	•00469634	•00759154	•01893668 •00713869
24	********	•00010710	*********	***********	•00/13669
INCHES	6	7	8	9	10
1	•02611001	•01968609	•0150 51 .88	•02782222	.11884.243
2	.02894262	•05726170	•02027312	•02898672	.19477398
3	•04072040	•05179553	•04113011	•053534 85	•21390760
5	•06895674	•05467538	•05727199	•06349882	•25153516
8	•07001565	•05620892	•05308071	•06772525	•19630905
12	•06443162	•03618398	•03846054	•04500459	•10709246
18	•03392671	•02260631	•02109902	•03174504	• 03339549
24	•01681560	.00842318	•00561611	•01092644	•01788097
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.00000000	4.78461538	1.00000000	1.81577098
1	•93900000	1.04515801	4.83873800	•81700000	2.14042928
2	.87499999	1.05541392	4.70278442	•66600000	2.27559868
3	.82199999	1.01977949	4.42877160	•54399999	2.25386612
5	.71899999	.98782323	3.99077243	•36199999	2.21357361
8	.57499999	•79985653	2.98817911	•19700001	1.84349883
12	.38499999	•55437986	1.78991880	•08700001	1.24524855
18	.18800000	•28644351	•79851788	•02500001	.56291912
24	.08100000	•11880046	•31937100	•00700000	.11880046

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET 254 1	SLANT MEP 4.874472	
	INC. ENERGY 3.000000	COS. THETA 1.000000	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT 4.600000	
SLAB CONFI	GURATION NEW	ADA TEST SITE	BOIL (50% SATUR	RATED)		
. •	REG	ION THICKNESS	ES (CENTIMETE	ŔS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•015000	•024856	•003458	•043000	•091403	•012717
Ž	.006000	•008245	•001058	.028000	.048957	.006279
3	•003000	•004561	•000803	•020000	.038802	.006833
4	.006000	•007439	•002102	•019000	.045604	.012888
5	•004000		•003109	•027000	•045118	.019616
6	.012000	•016750	•011288	•045000	.080313	.054124
7	.005000	•008571	•007267	•031000	.076620	.064961
8	.005000	.005576	•004970	•021000	.046925	.041824
9	•007000	•011071	•010108	•103000	.186602	.170376
10	.011000	•019059·	.018231	•078000	.190364	.182088
	NUM	BER OF SCATTE	RED NEUTRONS	VS • · ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	.012000	.045836	•029304	.028000	.106952	.066547
2	.008000	.030558	•019203	.029000	•110772	•065573
3	•009000	•028648	•012103	•030000	•095493	.060316
4	.004000	•012732	•007752	.036000	•114591	•082436
5	.004000	.012732	•006411	.042000	.133690	.099979
6 '	.005000	.015915	•014396	.035000	.111408	.100342
7	007000	•022282	•020885	•026000	.082760	•097077
8	.010000	•019099	•015813	•059000	•112681	.122412
9	•005000	.009549	•007149	•026000	•049656	.076501
10	.005000	•009549	•011472	•029000	.055386	.083271
11	•003000	•005730	•011170	•022000	•042017	•077570
12	•002000	•000955	•003094	•053000	•025306	.100492
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT . DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.081000	.069394	•007000	•074000	.113280	.062394	0,02399
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.415000	.850708	•571705	01.8807	•780927	•001000	.503000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
4604.402618		0,97271		1,35956	•	

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 690 3.00000000 .86603000 .00001010 28

	SCATTERED	FLUX	PER	NEUTRON	AT	REGION		IN			
IN	CHES	1		2			. 3			4	5
	-	•0492		•0881			04702			054704	•04375403
1		•1433		•1114			08545	7		107101	•07998342
2	1	•1632		.1941			10114			191878	•13522215
3		•2372		•227(12719			205994	•19818687
5		•23224		•1764			17507			530807	•15564154
8		.2379		•1844			11719			566152	•08586860
12		-2029	0229	•1714	+349	•	10805	607		889274	•07245030
18		•1011.	1830	. • 0787	7464	8 - •	02941	870	-	168282	. •03405771
24		•0329	6341	•0131	1106	2 •	00372	923	•00	924704	•00584751
TA	CHES	6		7			8			۵	10
* 14	CHLO	.07999	9448	•0626	1570	0 -	05157	253		, 427347 [,]	•24337853
1		.1729	-	•1050			09008			302488	•31700533
2		.1852		•1385		_	13988			037881	•43961720
3	*	-2366		•1603			14891	-		777696	•40468415
5		-1947		•1744			13795			517931	• 31564334
á		1706		•1306			09945			739336	•22464246
12		-1515		•0870			05082			760338	•10175282
18		•0554		•025	_		03131			759104	•05055630
24		•0106		•0054			01347			897351	•01057549
24		-0100	0032	•005	· / / / /		01541	717	•01	971371	******
	SCATTERED	_	TRA		NT.	IN EGY		5.		CKNESS	
	CHES	1		2			. 3			4	5
1				•001			01087			262405	•00133025
2		.0012		•013			01075			342227	•02142056
3	•	•0059		•013			01061		_	241414	•03758972
5		.0184		•025	-		02401			422241	•05273106
8 '		•0509		•0304			04025			957720	•02367997
12		.0373		•0524			03642			174200	•03009193
18		.0349		•034			00320			454736	•01169780
24		•0329	6341	•013	1106	• •	00372	923	•00	924704	•00584751
IN	CHES	6		7			8		•	9	10
1		.0354	0078	•031	1184	• •	01637	177	•01	651837	•14229804
2		.0460	9309	•031	2476	• 0	04281	781	•05	545394	•22972929
3		.0634	8862	•045	4917	74 •	05099	875	•07	166934	•26483049
5		.0780	6090	•053	8013	33 •	06234	256	•09	940872	•21691262
8		.0761	6259	• 054	0891	14 .	04442	789	•07	856438	•16473963
12		.0549	8458	-054	6050)5 •	02681	153	-07	862167	•08418171
18		.0238	5773	•013	7676	• 7	02224	033	- ′02	893106	•04604887
24		.0106	0032	•005	4311	• 16	01347	415	, •,01	897351	•01057549
						•					•
	Tr	TAL N	0.	TOTAL I	FILLIN	C TOT	AL DO	SE	UNCAN	O.FLUX	TTL.FLX/NT.
IN		RANS./		TRANS			NS./N		TRANS		REGION BDS.
- 14		1.0000		1.154			52476			469441	2.02180327
1	•	•9230		1.171			43570			336328	2.31276343
2		.8559		1.178			28977			283870	
3		.7979		1.157			00088			157374	
5		.6779		1.002			04553			680058	2.27949499
8		.5309		•769			75477			666825	1.66067612
12		.3599		•556			75113			928167	
18		.1620		•260			73740			616572	
24		.0710		.127	-	-	31314			346409	

	RUN NUMBER .	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 5.628526	
	INC. ENERGY 3.000000	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC.DSE/NT 5.311594	
SLAB CONFI	GURATION NEVA	DA TEST SITE S	BOIL (50% SATUR	ATED)		·
			ES (CENTIMETE		·	
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800 ·	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.013000	.027579	.003837		.042642	.005933
2	.009000	.010696	.001372	•040000	.076350	.009793
3	.003000	003653	•000643	.027000	.040721	.007170
4	.005000	.010028	.002834	.022000	.035115	.009924
5	.003000	.007260	.003156	•023000	.037892	.016475
6	.005000	.011290	•007608	.049000	.069279	046688
7	•004000	.004538	.003847	.033000	.054263	.046005
8	.005000	.010291	.009172	.030000	.044663	.039809
9	.013000	.016232	.014821	.099000	.168247	.153617
10	.008000	.009627	•009209	•095000	.210773	.201609
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		,
ANGULAR	NO. TRANI.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1.	.010000	.019099	.010020	•070000	.133690	.075898
2	.008000	.015279	.010618	.068000	.129870	.092507
3	.008000	.015279	.006944	.051000	.097403	.068161
4	.0160.00	.030558	•017069	.065000	.124141	.088257
5	.004000	.007639	.004714	.038000	.072574	.087676
6	.006000	.011459	.011467	.035000	.066845	.080048
7	.003000	.005730	.008115	.032000	.061115	.056938
8	.006000	.011459	.012546	•036000	.068755	.071842
9	.001000	.001910	.001361	.016000	.030558	.123313
10	.003000	•005730	.011442	.010000	.019099	.063422
11	.001000	.001910	.002765	•015000	.028648	.115486
12	.002000	.003820	.010847	.014000	.026738	.102087
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•071000	•059500	•003000	•068000	.111194	.056500	0.02365
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.450000	.779945	.537023	020823	.765117	•002000	.477000
		MEAN ENERGY		MEAN ENERGY		•
_		SCAT.TR.NT.	,	REFL. NT.		*
4604.405236		104320		1,38820	•	•

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 691 3.00000000 .70711000 .00001010 28

SCATT	FRED FLUX PER	NEUTRON AT REG	SION BOS. IN	FNERGY GRPS.	
INCHES	1	2	3	4	5
17761.20	•07705052	•07926348	•02965802	.04224848	•06411401
1	•15080220	•10785968	.07289512	•07056548	•09246937
Ž	.17200479	•16792492	•12156632	.08124710	.10895738
3	19924305	•20437212	.14491972	.11337730	•09315007
5	18952959	23009299	14027446	•13504750	12088059
8	.24987222	•16115209	•11361995	.08048195	.12824857
12	.19816977	•12790596	•07898201	.06339532	.05536689
18	.10454136	•05066356	•04890006	. 02988607	•03403774
24	.01219553	•00710218	•00368689	.00544498	•00930885
		,			
INCHES	6	7	8	9	10
	•12856101	•07428949	•06073253	.22384053	•23601700
1	•15472891	•11517390	·10249810	.32819740	•41752746
2	•20668062	•13934416	•12270931	•29523492	•43870901
3	•24971151	•16701992	•16109369°	•33543570	43876865
5	.22515308	•14948142	•14531805	•27346777	•30687510
8	.18233463	•10796096	10255545	•16908172	•18370401
12	•13331503	•06425532	.05346188	.07163457	•11317491
18	.04697392	•01791528	•05039405	.03416144	.02723222
24	.00770583	•00536956	.01028413	.00840845	•00762923
					•
	ERED FLUX TRAN		EGY. GRPS. V		_
INCHES	1.	2	3	4	5
1			•00576020		•01147778
2	•00290562	•00242768	•00709287	•00667581	•02782412
3	•00527816	•00249089	•01612488	•01951338	•02781567
5	.02095102	•03480155	•03136970	•03235404	•03615472
8	•05629509	•06331865	•03555245	•02860199	•03101363
12	•05117399	•04022854	•03107568	•02370920	•01947978
18	•04039850	•02641688	•01138438	•01248570	•02168492
24	•01219553	•00710218	•00368689	•00544498	•00930885
INCUES		-	8	9	10
INCHES	6 •01491665	7 •02477178	•01247382	•03978164	10 •22585714
1	•04467024	•04641533	•04165854	•08046557	•29858160
2 3	•07024167	•04500890	•05850584	•12584349	•31989263
<i>5</i>		•05499893	•07059393	.13933541	•23462179
8	•07652257 •07055771	•04928252	•05513979	•06561481	•14093774
12	•06963220	•03679362	•04070541	•06032477	•08654404
		•01160111	•02841338	•03288368	•02480590
18	•02073166		•01028413	•00840845	•00762923
24	•00770583	•00536956	*01020413	•00040045	• 00/102723
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.41420712	6.76643716	1.41420712	2.36953553
1	•91300000	1.39710856	6.54146344	1.06206956	2.67478717
Ž	.82399999	1.35491599	6.13365516	•79619860	2.65057712
3	.75499999	1.28751092	5.64580538	•59679540	2.70388715
5	62999999	1.06828495	4.24482837	.33658129	2.25270184
8	45599999	•73773509	2.46530232	•14142071	1.62043225
12	.28699999	•50350766	1.55360933	04384042	1.00350208
18	.13800000	•23787713	•63060408	•00707104	•45177674
24	.05500000	•07854985	•20787637	.00141422	•07854985
- "	17774400			*******	10,027,03

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET ₽ φ	SLANT MFP 6.893513	
	INC. ENERGY 3.000000	COS. THETA .707110	CUTOFF EGY .000010	INC.FLX/NT 1.414207	INC.DSE/NT 6.505353	
SLAB CONFI	GURATION NEVA	DA TEST SITE SO	DIL (50% SATURA			
	REG	ION THICKNESS	ES ICENTIMETE	(RS)	-	
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN-FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.009000	.009098	.001266	.044000	.054483	.007580
2	.005000	.005243	.000672	.042000	.056048	.007189
3	.002000	.002260	.000398	•020000	.020971	.003693
4	.004000	.003855	.001089	.027000	.029874	.008443
5	.005000	.008188	.003560	.033000	.045336	.019711
6	.005000	.004878	.003287	.057000	.090907	.061263
7	.004000	.003705	.003141	.041000	.052531	.044537
8	.008000	•007710	.006872	•029000	.042945	.038277
9	.006000	.006266	•005721	•119000	.158280	.144516
1.0	•006000	.005150	•004926	.093000	•166890	•159634
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	,	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.012000	.022918	•011027	.077000	.147059	.069021
Ž	.013000	.024828	.011455	.068000	.129870	.077847
3	.005000	.009549	.004854	.069000	.131780	.070710
4	.008000	.015279	.007981	.066000	.126050	.068960
5	.003000	.005730	.005531	.041000	.078304	.068908
6	.006000	011459	•007888	•049000	.093583	.083738
7	.004000	.007639	.006159	.038000	.072574	.073379
8	.002000	.003820	•000709	•035000	.066845	.054159
. 9				•015000	.028648	.096447
10	.001000	.001910	003473	.0160.00	.030558	.096864
11	• • • • • •	• • •		• 016000	•030558	.083458
12				•015000	.028648	.101587
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT .NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.055000	.031933	.001000	•054000	.056353	.030933	0.01835
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.505000	.718265	.494843	022745	.752966	.001000	.439000
		MEAN ENERGY		MEAN ENERGY		•
		SCAT.TR.NT.		REFL. NT.		
4604.405236		101952		1,35118		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 3.000000000 .34202000 .00001010 28

CCATTI	ERED FLUX PER I	MELITOON AT DEC	SION BOS. IN	ENEDGY GDDS.	
INCHES	TRED FEDA PER I	2	3	4	5
Menes	.05663749	•07080451	•03279101	•04008401	• 09834695
1	.12469712	•15161109	•07206237	•08877538	•12685112
Ž	-14046583	•15349772	.09184437	•09608086	.13423147
3	.17298618	•17703922	•07796812	10838635	.11467403
5	•20306674	•19113597	•12274282	•11803170	.12634477
8	.17274431	•18252712	•10506216	.05944069	.10122485
12	.13317336	•09865028	•05731101	.03407081	.03507846
18	.04381616	•03073395	•02458981	•01349516	•01364021
24	.00116760	•01631008	•00695229	.00161193	•00602432
INCHES	6	7	8	9	10
	.13633449	•12474202	•07006700	•29835202	•39903800
1	•21093976	•17892441	•17133860	•31915327	•62127841
2	•23453981	•18650412	•16567207	•31781300	•49827016
3	•24129659	•17757167	•13702423	•29328011	• 39063878
5	•23489347	•15311315	•12022705	•21576443	• 26756447
8	•15035290	•11123165	•05296622	.11275559	•11632357
12	.07263348	•04284941	•02902520	•05008693	•03391565
18	•01631280	•01198136	•00751660	•00488101	•01155732
24	•00152548			•00432275	•00697188
			564 6005 W	- THECKNESS	
INCHES	ERED FLUX TRAN	2. PER NI . IN.	EGY. GRPS. V	S. THICKNESS	5
1 nches	1	•00121591	•00944785	•00583216	•01236274
		•01662594	•01850437	•00994784	•04060669
2	•01262923		•02066197	•00759009	•02978132
3 5	•02840500	•03005629 •01867412	•02714074	•03087610	•02776132
8 ·	•02871196	•04932924	•03333638	•02038624	•04642189
12	•04476456	•03239408	•02678150	•01229796	•01696869
18	•01728941	•01619393	•01244504	•00561037	•00724112
24	•00116760	•01631008	•00695229	.00161193	•00602432
44	•00110100	101031000	***************************************	***************************************	***************************************
INCHES	6	7	8	9	10
1	•06675021	•03514298	.02333284	•09159123	.36358741
2	•06909660	.08198205	•05788803	.13886627	.34709199
3	.08421914	.08734186	.06711897	.15136672	.32630151
5	•07813533	•08667650	•05418003	11489224	•23447127
8	•05903354	•04568170	•03055678	•07497495	.10545763
12	.03087794	.02746882	•02005648	.02786488	.03271588
18	.00998264	•00637383	.00539529	•00488101	.01155732
24	•00152548			.00432275	.00697188
_		•			
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	2.92380562	13.98928537	2.92380562	4.18695147
1	.80699999	2.22320405	10.32102099	1.61394071	3.67957224
2	•66499999	1.67237049	7.40275066	•89176070	2.91068012
3	•57799999	1.30826646	5.54252438	•49119936	2.38206461
5	•44699999	•85992142	3.28835481	•14911411	1.90199868
8	•30999999	•51728077	1.60692197	•02339046	1.18801953
12	.17000000	•27219079	•67828288		•58679459
18	•06200000	•09696996	•20518598		•17852438
24	•02300000	•04488633	•08404074	•	• 04488633

					jki		
		RUN NUMBER 692	HISTORIES 1000	ENERGY SET 28	ANGLE SET ₽ф	SLANT MFP 14.252008	
		INC. ENERGY 3.000000	COS. THETA 342020	CUTOFF EGY .000010.	INC.FLX/NT ,2,923806	INC.DSE/NT 131449506	4
	SLAB CONFI	GURATION NEVA	ADA TEST SITE S	DIL (50% SATUR	ATED)		•
		REG	ION THICKNESS	ES (CENTIMETE	(RS)		
	2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
	15.2400	15.2400					
		Num	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
	ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
	GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
	1	.001000	.000422	.000059	.031000	.019371	.002695
	2	.006000	.004632	•000594	.045000	.024217	.003106
	3	.002000	.002445	•000431	.020000	•011215	.001975
	4	.001000	•000671	•000190	•025000	.013709	.003874
	5	.004000	.002114	.000919	•047000	.033637	.014625
	6	.001000	.000671	•000452	•079000	•046629	.031424
	7				.061000	•042664	•036172
	8				.031000	•023964	.021359
	9	.003000	.001515	•001384	.122000	.102042	.093169
	10	•005000	.002609	•002495	.162000	.136479	.130545
		NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
	ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
	SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
	1	.001000	•001910	•000290	•082000	.156608	.037053
	2	• 004000	.007639	.001293	•078000	.148969	.043396
	3	•004000	.007639	•002390	•073000	.139419	.037923
	4	.003000	•005730	•001016	•077000	.147059	.038665
	5	•002000	.003820	•001784	•047000	.089763	.046408
	6	•002000	.003820	•002034	•050000	•095493	.048537
	7	.003000	•005730	•001948	.048000	.091673	•039561
	8	•002000	.003820	•000527	•080000	•15278 8	.074142
	9	.001000	.001910	•000680	•022000	•042017	.066851
	10	F'			•016000	•030558	.046558
	11	•001000	.001910	•000496.	•016000	.030558	.051320
	12				•034000	•064935	.116920
	(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT-NO-FLX	SCAT. DOSE	SCAT. EGY.
1	RÁN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
	•023000	•006523	•	•023000	•015079	.006523	0.00742
	NUMBER	NO. FLUX	DOSE!	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
F	EFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
	•623000	.453928	.338945	031155	.681017	•002000	.352000
			MEAN ENERGY		MEAN ENERGY		
	,		CCAT.TD.NT.	1	PEFI . NT.		,

SCAT .TR.NT. 0,96788

4604.405236

REFL. NT. 150025 RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 5.000000000 1.000000000 .00001010 2A

	SCATTERE	D FLUX	PER	NEUTRON	AT RE	GION BD	5. IN	ENERGY GRPS.	•
	INCHES	1		2		3	}	4	• 5
		•03671	108	•0595	4693	•022	02469	•01338291	•02142329
1		-10034		•0693			85921	•02966160	•04859670
2		.14185		•1.118		•055	64779	•06558233	•07988458
3		.21570		•1180			68665	•08516975	•11294070
5		.22782	-	•2050			98288	•07684848	•10544424
8		.27793	-	. ∙2026			86344	•09909043	•07058090
12		.27382		•1705			64163	•08405097	•07065923
24		.10028		•0576		•029	49971	. •01289100	•01465125
36		•00566	577	•0024	9970			•00109085	
	THEURS.			-				•	1.
	INCHES	• 06657	7400	. 7 •0662	11226	100	65950	9 •10676169	10
1		•09323	-	•1122	-		33864	•18661722	•14288689 •29006463
2		15409		•1103			27604	•18541442	•33191507
3		14651		.1287			18591		•36500563
5		.16796		.1810			14878	•19192076	•35993810
8		.17348	-	•2124			18393	•13491251	•22378704
12		13602		•1342			91831	•08208021	•20212983
24		•04640		•0578			67655	•02277105	•05906102
36		•00101		•0054			91227	•02277103	• 00567459
30		•00101	1040	•0074	41.13	•000	71221	***************************************	• 00 76 7 7 7 7
	SCATTERE	D FLUX	TRAN	NS. PER N	T. IN	EGY. G	RPS.	VS. THICKNESS	
	INCHES	1		2		3		4	5
1						•005	73591	•00719394	•00406531
2				•0020	8428	-	22757	•00139970	.01719919
3		•00271	1087	•0033	2677	•004	08153	.00247415	.02497257
5		.01167		•0210			73439	•01724928	.01692671
8		.02783		•0259			18781	•02741475	.02902370
12		.03913	3515	•0362			44798	.01634862	.01936565
24		.02294		•0190	-		33251	•00916515	.00531024
36		.00566		•0024				•00109085	
	INCHES	6		7		8	1	9	10
1		.00599	098	•0135	4813	-014	27952	•03906172	•12191984
2		.02848	3412	•0327	822.0	•028	88093	•05179522	.17718382
3		•04109	9601	•0405	7840	•038	53412	•06035614	.21531382
5		•04065	5574	•0603	4096	•063	48383	•09423304	•20608662
8		•03764	085	•0745	6391	•084	00973	•05792688	•16995214
12		•03955	156	•0487	0742	•085	01354	•05139631	•15651452
24		•01065	850	•0193	0477	•025	85130	•01630194	•04116446
36		•00101	646	•0054	4173	•006	91227	•00124547	• 00567459
	_								
		OTAL NO		TOTAL F		TOTAL	_	UNC.NO.FLUX	TTL.FLX/NT.
	INCHES T	RANS./		TRANS.		TRANS		TRANS./NT.	REGION BDS.
_		1.00000		1.0000			23077	1.00000000	1.59015186
1		•95000		1.0547			61057	•84300000	1.98330857
2		•89200		1.0510			45157	•71000000	2.10682664
3		84099		1.0314			07070	•59800001	2.23551902
5		•74699	-	•9674			09249	•42500000	2 • . 20610451
8		•61699		-8154			55332	•25400001	1.93493687
12		•45799		•6577			85272	.12799999	1.53817786
24		•13500		•2001			76721	•01599999	•46875237
36		•02400	1000	•0315	4685	•111	64594	•00200000	•03154685

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET,	SLANT MFP 6.167081	
	INC. ENERGY 5.000000	COS. THETA 1,000000	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT 5.800000	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (50% ŞATU	RATED)		
· .	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
30.4800	30.4800		,		20000	
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•004000	.005577	•000615	•020000	.036711	•004051
2	.002000	.002455	•000250	.028000	.059547	.006057
3		*****	***************************************	.015000	.022025	
4	.001000	•001065	.000239	.011000	.013383	.003000
5				.014000	.021423	.007387
6	.001000	.001011	•000540	.030000	.066577	.035584
7	•004000	.005266	.003632	.032000	.066212	.045664
8	.004000	.009819	.007280	.059000	.106659	.079075
9	•001000	.001262	•001023	.055000	.106762	.086514
10	•005000	.005699	•005404	.067000	.142887	.135496
	NUM	BER OF SCATTE	RED NEUTRONS	VS+ ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•004000	.015279	•008779	.034000	.129870	.077450
2	.002000	.007639	•003716	.027000	.103132	.064712
3	•004000	.012732	.009796	.028000	.089127	.066864
4	.002000	.006366	.006383	.027000	.085943	.055975
5	.003000	.009549	.007509	.031000	.098676	.080673
6	•001000	.003183	•002958	.022000	.070028	.066167
7	.001000	.003183	.000468	.018000	.057296	.047163
8	.003000	.005730	•002935	.037000	.070665	.070004
9	.001000	.001910	.002428	.028000	.053476	.056467
10	-	* -		029000	.055386	.073635
11				.015000	.028648	.042707
12.	.001000	•000477	•002094	.035000	.016711	.067805
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.024000	.020983	•002000	•022000	.032155	.018983	0,00868
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•331000	.642186	•405904	014189	.847425	.083000	.562000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.502618	•	1,97356		214330		
				. —		

		··· · · ·			
SCATT	ERED FLUX PER !	EUTRON AT REC	SION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
11,01,20	•06838703	•03310501	•03741603	•01920802	• 06638204
1	•07454009	•06229342	•05169541	•05100192	•09211366
2				.09158144	• 09600596
	•14653691	•11801378	•08388001		
3	•16860186	•13401963	•06921865	•06743720	.09288440
5	.16098614	•14149593	•08940267	•06631240	10276374
8	•20022194	•20422857	•12778984	•06107512	•10543131
12	•22198355	•14257370	•07247618	•07877059	• 05718544
24	•06668467	•06275155	•02575947	•01929084	•02871449
36	•01085330	•00918249	•00204491		• 00354766
					•
INCHES	6	7	8	9	10
	•04890255	•06809400	•11011301	·11984250	•20198398
1	•09914186	•09739475	•20263570	•15469920	.27803937
2	•10927677	•13037123	.20831619	.16042461	•32991059
3	•15426203	.12924594	.19262847	•18716952	. 36167492
5	•16854482	•19260174	•19039244	•14695203	• 35557629
8	14189554	•23077563	•22957278	17120543	•27847292
12	•15664145	•15754913	•16827272	•11022419	17865955
-					
24	•03580875	•03447483	•03422987	•03988763	•02616898
36	•00170990	•00275374	•00393436	•00185824	• 00407349
	ERED FLUX TRANS				_
INCHES	1	2	3	4	5
1		*	•03146276	•00297533	• 00363364
2		•00166354	•00562689	•01086243	• 00625052
3	•00156995	•01090425	•00258841	•00588095	• 02056965
5	.01915779	•01088449	•01473199	•01284931	• 02824469
8 .	.02639614	•03898055	•02303932	•02326742	•02214758
12	•04004551	•04138192	•01895492	•01676350	•01721872
24	.01636355	.02377236	•00488069	•00698677	.00443087
36	.01085330	.00918249	.00204491		•00354766
••					
INCHES	6	7	8	9	10
1	•00856766	.03154401	•03194474	.03828795	.09894431
ž	•01963685	•05562549	•04103792	•03264587	18950492
3	•03159404	•04842853	•05248660	•06847489	•24394185
5	•03252327	•04614165	•08195303	•07365107	•25047047
8			-	•07855453	• •
	•03587316	•07596548	•12144478		•21226656
12	•06132465	•06445255	•08217158	•06968116	•13447421
24	.01810411	.02275689	•02050515	•02764157	.02491491
36	•00170990	•00275374	•00393436	•00185824	•00407349
					· · ·
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.15469441	6.66169852	1.15469441	1.88572799
1	•93600000	1.16536451	6.52868924	•94800410	2.11155949
2	.85900000	1.13996377	6.20479173	•77710933	2.25142683
3	.80499999	1.12383044	5.97336712	•63739132	2.19453396
5 '	.70199999	1.00015407	5.01863718	.42954631	2.04457453
8	.57099999	.89464788	4.05359452	.23671235	1.98738145
12	42299999	.65385531	2.65486894	10738658	1.45172310
24	•11700000	•17959445	•61683895	•00923756	• 38300865
36	•01800000	•03995810	•08861516	100/25/30	•03995810
70	•0190000	•032220IO	•A0001210		• 03443010

	RUN NUMBER	HISTORIES . 1000	ENERGY SET	ANGLE SET	SLANT MFP 7.121094	
	INC. ENERGY 5.000000	COS. THETA .866030	CUTOFF EGY	INC.FLX/NT 1.154694	INC.DSE/NT 6.697228	
SLAB CONFI	GURATION NEVA	DA TEST SITÉ S	OIL (50% SATUR	ATED)		
·		ION THICKNESS	ES (CENTIMETE	ERS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5•0800 .	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003000	.007260	.0008.01	.032000	.059225	.006535
2	.002000	•006191	.000630	.019000	.028670	.002916
3	.001000	•001700	•000237	•0150 00	.032403	.004525
4				•0150 00	.016635	.003728
5	.002000	.003399	.001172	•027000	.057489	.019824
6	.001000	•001700	•000908	•0270 <mark>00</mark>	.042351	.022636
7	•002000	•002768	•001909	•031000	•058971	.040670
8	•003000	.003837	•002845	•059000	.095361	.070699
. 9	•001000	•001700	•001377	•069000	.103787	.084103
10	.003000	.003469	•003289	.087000	.174924	.165876
	NUM	BER OF SCATTÉ	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•002000	.003820	•003204	•067000	.127960	.062170
2	.001000	.001910	.001513	.049000	.093583	.067685
3	.002000	.003820	•001721	.048000	.091673	.062712
4	.003000	.005730	.001858	•047000	.089763	.058922
5	.003000	•005730	•004427	•021000	.040107	.043479
6	.003000	•005730	•006604	•029000	•055386	.065165
7	.001000	.001910	•002630	•042000	.080214	.086852
8	•001000	•001910	•001119	•029000	•055386	.057409
9 ,				•010000	•019099	.071014
10	•			.018000	•034377	•115089
11	•002000	•003820	•002075	•010000	•019099	.052543
12				•011000	•021:008	.061989
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•018000	.013169		•018000	•032023	.013169	0,00624
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.381000	.669817	.421514	01 7055	.823198	.076000	•525000
. 4		MEAN ENERGY		MEAN ENERGY	•	•
		SCAT . TR . NT .		REFL. NT.		
5805.505236		1,73451	•	223821		

JEAD CO	NI TOOKATION NEVA	DA 1631 311E	00 ir 100 % 0A	OWN LED!	•
SCA	TTERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	.1	2	3	4	5
	•03996551	•04130301	•04657904	•03667505	•03329002
1	.13402718	•06321466	.04853441	. 04507954	•06325556
ž	.15117589	.10861813	.05749142	•08962126	.10694860
3	.13816681	.13354131	08902923	•06344539	•08990880
5	.18229261	•17481605	•08107087	•07066704	.12265212
8	•21416013	.18471868	•10733205	•10787503	.09716128
12	-20106046	•10891972	•06231949	•04192096	.06404243
24	.04888785	•03051876	•01889506	•00525593	•03229970
36	•00213665	•00144099	•00225473	. 40072777	
30	000013003		10022713		
INCHES	6	7	8	9	10
2.110.1120	.05892751	•09965101	•10680153	12285798	•26134197
1	•10086617	.13257461	•17671232	.21284740	•39911352
2	.13216498	•18470194	•20713095	•24569780	•39460909
3	.17561854	•20761098	•28371193	•22188059	•42009301
5	.25737535	•21871277	•25468383	•18836161	•42210809
8	.18059892	•17653111	•19646132	•12153280	•25347353
12	•10458624	•16339228	•12943423	•08902927	•17680375
24	•03321735	•02581655	•02885591	•01219276	•02722799
36	•00132037	•00127845	•00285698	*01217270	•00227466
50	•00152057	*00127043	•00203090		• 00221400
SCA	TTERED FLUX TRANS	S. PER NT. IN	FGV. GRDS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	-		•	.00227825	•00481929
2	.00145713		•00386595	•00101650	.00497271
3	•00508650	•00513608	•00766517	•00319863	•00435189
5	•00894073	•01828188	•01193468	•00835194	•01343302
8	.02909219	•03203126	•02955406	•03175491	•01837199
12 .	•05531669	•02845501	•01475551	01256951	•02902412
24	.01664236	•00347644	•00685310	•00259736	•01078256
36	•00213665	•00144099	•00225473	100277130	***************************************
,,	000=13003		00000		
INCHES	6	7	8	9	10
1	•00478407	•01686761	•02310249	•04594147	•16055413
2	.01630486	.02234412	•04076881	•08746128	•23503128
3	.02636723	.05203719	•08416064	•09875607	•27513486
5	•05921954	.07414591	•11558914	•09693212	•30511839
8	.05825800	.04780114	•09147070	•05517951	•22268701
12	.04486472	.03865000	•06677352	.04485449	.13985914
24	.01290680	.01198988	•01880984	.00490288	•02294849
36	•00132037	.00127845	•00285698	***************************************	•00227466
- · · ·	***************************************				***************************************
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.41420712	8.15888725	1.41420712	2.22729507
1	•90500000	1.36849991	7.73926026	1.11015258	2.48637798
2	.82999999	1.28437423	7.12833179	87115159	2.54931165
3	•78099999	1.24495630	6.67169924	•68306205	2.50606864
5	•66199999	1.13338106	5.69103952	•42143372	2.39417407
8	.49999999	.81984661	3.62197489	•20364583	1.84349069
12	33499999	•55148989	2.17369997	•07636717	1.21787604
24	•08200000	.11473813	•38009600	•00282841	26599629
36	•01000000	•01356282	•03813714		.01356282
J-0					

	RUN NUMBER 695	HISTORIES 1000	ENERGY SET	angle set θφ	SLANT MFP 8.721530	
	INC. ENERGY 5.000000	COS. THETA .707110	CUTOFF EGY	INC.FLX/NT 1.414207	INC.DSE/NT 8.202401	
SLAB CONFI	GURATION NEVA	DA TEST SITE S	OIL (50% SATUR	ATED)	•	
	REG	ION THICKNESS	ES (CENTIMETE	(RS)		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.002000	.001595	•000176	.027000	.028260	.003118
2	.001000	.000873	.000089	.020000	.029206	.002971
3	.001000	.001388	.000194	.016000	.032936	.004600
4				.023000	.025933	.005813
5				.021000	•023540	.008117
6	.001000	.000873	•000466	.032000	.041668	.022271
7	.001000	.000873	•000602	•050000	.070464	•048596
8	.002000	.002260	•001676	.057000	.075520	.055989
9				.068000	.086874	.070398
10	•002000	.001595	•001512	.110000	.184798	.175239
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.002000	.003820	.001460	.071000	.135600	.062430
2	.002000	.003820	•001419	.051000	.097403	.047647
3	.001000	.001910	.001149	.050000	.095493	.057247
4	.003000	.005730	.002640	.063000	.120321	.070386
5		_		.026000	.049656	.041701
6	•002000	.003820	.002335	.037000	.070665	.067501
7				.032000	.061115	.048711
8				.043000	.082124	.069283
9				.012000	.022918	.073972
10				.009000	.017189	.055930
11				.016000	.030558	.094177
12				.014000	.026738	.069441
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.010000	.004715		•010000	.009455	.004715	000328
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT. .424000	REFL. FACT. .599200	REFL. FACT.	REFL. FACT. Q19586	FACTOR -800851	FACTOR •100000	FACTOR. •466000
		MEAN ENERGY		MÉAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.505236		1,64182		2,30965		

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 5.00000000 .34202000 .00001010 2A

	SCATTERE	D FLUX	PER	NEUTRON	AT R	EGION	BDS.	IN	ENERGY GRPS.	
	INCHES	1		2			3		4	5
		.03419	653	•0484	6701	• (04772:	353	•02918001	.05046753
1		.08466		•0937			5706		•04922822	• 08372570
2		0993	-	•1149			7759		•07296609	•10725586
3		.13617	-	•1342			10914		•07027634,	•12508877
5		•20758		•1328			3044		•07895671	•10045441
. 8		•13674 •13643		•1748 •0948	-)91584)4473		•08968768 •04461548	•07140489 •03331365
12		•01879		•030			01492		•01028425	•00106171
36		.00467		•0012		•	2142E	. , ,	***************************************	***************************************
,,										
	INCHES	6		7			8		9.	10
	•	•07350	0600	•1308	32352	•	14502	148	.25860902	•42861799
1		•10302			36783		29728		•29324977	•61215662
2		•17086		•1993			281039		•32466793	•50158382
3		.24890		•2268			31094		•22398079	•48965477
5		.17620		•1668			24291		•13274521	• 32012233
8		•12770			38308		14684		•08940301	.17755674
12		•09238			75258		06851		.03301624	•06647808
24		•00767		•0164	8572	• 1	00460	194	•01138469	.00211689
36	1	.00184	+263							•00129666
	SCATTERE	D FLUX	TRAN	S. PER	I . TP	N EGY	GRP:	S. 1	VS. THICKNESS	
	INCHES	1		2			3		4	5
1				•0025	6151	•	002384	481	•00330220	•00923047
2	!				+0605		00656		•00110580	.02551083
3		•0060			51309		00885		•01361284	•02760930
5		•02149			36385		02574		•02092136	•02741614
8		•0090			1804		02829		•03166236	.03209124
12		•03720			30711		31704		•00890119	•01464878
24		.0113			31103	• 1	00572	0 78	•00409118	•00106171
36		•0046	1809	•0012	26720					
	INCHES	6		7			8		9	10
1		•01682	2446		+0865		081134	457	•08640798	•29239806
2		.04368			16566		38268		•15154086	•31687500
3	•	.0452	5040		54287	•	12061	384	-10582389	.32395181
5		.06696	5023	•078	72967	•	9372	652	•07954830	.25883446
8	l .	.05709	9038	•0696	50166	•	9766	283	•06223482	•14367690
12	,	.03684	4625	•0542	22071	•	04722	010	•02334335	•06170901
24	•	•00617	7689	•0109	93994	•	00136	542	•00540444	•00211689
36)	.00184	4263							•00129666
	1	TOTAL NO	٠.	TOTAL F	FLUX	TOT	AL DO:	SE	UNC.NO.FLUX	TTL.FLX/NT.
		RANS - /		TRANS			NS./N		TRANS./NT.	REGION BDS.
		1.00000		2.923			86810	-	2.92380562	4.10284416
1		.82199		2.2914			84924	-	1.77182619	3.63880738
2		.68699		1.779			55679		1.07303665	3.02268326
3		.58699	9999	1.403	13134	7.	18438	488	•64908485	2.72435777
5		•45899	9999	•933	56716	4.	27947	716	•23682825	1.87600342
8		.33399		•621	00369		46250		•05262848	1.31575680
12		•20799	9999	•341	29726		13503		•00584760	•72332651
24		•03400		1.054			12905			.11783313
36	•	•00500	0000	•009	0,8458	•	01545	086		•00908458

	RUN NUMBER 6 96	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 18.031347	•
	INC. ENERGY	COS. THETA .342020	CUTOFF EGY	INC.FLX/NT	INC . DSE/NT	•
make of the contract of	7,00000	.342020	•000010	2,923806	16.958073	
SLAB CONF	GURATION NEW	ADA TEST SITE S	OIL (50% SATUR	ATED)	•	
, .		GION THICKNESS	ES (CENTIMETE	(RS)		,
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1 .	.002000	.002694	•000297	.022000	•011696	001291
2	.001000	.000422	•000043	.028000	.016577	.001686
3		••••		•022000	•016322	.002279
4				.017000	.009980	.002237
5 .				.026000	.017261	•005952
6	•001000	.000671	.000359	.045000	.025140	.013437
7				.060000	.044744	.030858
8				.070000	.049600	•036773
9				.106000	.088449	.071675
10	•001000	•000422	•000400	.162000	.146596	.139013
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		•
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
i	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	THE TY SILEN	1 11 1 1 1 1 1 1 1	•071000	•135600	•026003
2	.001000	.001910	•000082	.067000	.127960	.034398
3	***********	************	***************************************	•052000	.099312	.029033
4	.001000	.001910	.000764	.075000	.143239	.038795
5	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	•048000	.091673	.043420
6				.046000	.087853	.041320
7	.002000	.003820	•000827	050000	.095493	.045736
8	• • • • • • • • • • • • • • • • • • • •	•	***************************************	.058000	.110772	.050819
9 .				.018000	.034377	.048570
10	•			.015000	.028648	.046791
11				.018000	.034377	•050562
12	.001000	.001910	.000426	.040000	.076394	.127443
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX		
TRAN.FACT.	TRAN. FACT.	NO. FACTOR			SCAT. DOSE	SCAT. EGY.
.005000	.001099	NO. FACTOR		TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•005000	.001099		.005000	.004210	•001:099	0 00100
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ARS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•558000	•426366·	.305201	0,28168	.717309	.086000	.351000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.505236		0,99881		252404		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 14.000000000 1.000000000 .00001010 2

SCATTI	RED FLUX PER	NEUTRON AT REG	SION BDS. IN	ENERGY GRPS.	,
INCHES	1,	2	3	4	, 5
	•04955649	•03138970	•01324972	•01376069	•03059198
1	•09893129	•06334222	01963506	•03369593	•05047739
2	.08303719	•09550858	•04788238	•08257583	. • 07615014
3	.14446968	•10075819	•04376394	.04688337	.08098636
5 .	•15634660	•11379580.	•07217640	.08406891	.08323243
8	•16851241	•12484272	•06326416	•05237367	.06948409
12	•08648921	•09325092	•06520957	•05945112	• 05847483
24	•07196100	•04873244	•03023507	•01051283	•01596172
36	•00104969	•00361201			.00487335
		_			
INCHES	6	7	8	9	10
_	•06192560	•07440598	•06067979	•05814638	•13176070
1	•09320877	•10939221	•07544261	•10111043	.23808739
2	11826855	•13187579	•10805957	.06889489	•30157632
3	•15926591	•15316114	•09475060	.08194524	• 32120367
5	•13098560	•11415146	•09162754	•12418581	• 31251822
8	•14067916	•13924936	•08442622	•08252769	•28756719
12	•06046098	•08100011	•06375542	•06483925	•22933142
24	.02120658	•03176898	•02848814	.02853441	• 06722882
36	•00455444	•00402193	•00100556	.00178382	•01153558
SCATT	ERED FLUX TRAN	S. DER NT. IN	FGY. GRPS. V	S. THICKNESS	
INCHES.	1	2	3	4	5
1	• ,		•00800000	•00178199	•
2		•00257862	•00249122	•01120644	.00182996
3	•00756676	•00468739	•00223853	•01133386	• 00984630
5	.03025948	•03292503	•00933382	•01421010	+02507046
8	.03542714	.02687376	•009099-26	•01095002	•01501514
12	.01546638	.02544687	•01999166	.02842093	•01195137
24	.02000416	.01871744	.00567222	•00367380	.00786741
36	.00104969	•00361201			.00487335
INCHES	6	7	8	9	10
1	.00799728	•02600745	•00892359	•02404870	•10412279
2	•01744960	•03495320	•03784204	•02404972	•16511725
3	•04121295	•05373135	•03142753	•02993314	•19305163
5	•05177903	•03696908	•03019134	•04402514	•23109020
8 .	•03679454	•05379181	•03992426	•04597622	•22795452
12	.02320845	•04569565	•03626627	•02393142	16827961
24	•00766656	•01395743	•01303891	•01055656	•06283148
36	•00455444	•00402193	•00100556	•00178382	01153558
	•		,		
	TOTAL NO	TOTAL FLUX	TOTAL DOCE	LINC NO ELLIV	TTO ELWANT
INCHES	TOTAL NO. Trans./nt.	TOTAL FLUX TRANS./NT.	TOTAL DOSE	UNC.NO.FLUX TRANS./NT.	TTL.FLX/NT. REGION BDS.
INCHES	1.00000000	1.00000000	7.00000000	1.00000000	1.48617825
1	•93900000	1.03188180	6.98741247	•85100000	1.73432331
2	•89200000	1.02251807	6.73524044	•72500001	1.83882925
3	.82099999	1.00202943	6.34116059	•61700001	1.84418810
5	.72799999	•95285368	5.51228229	•44700000	1.73008879
8	58799999	•77680667	4.34295399	•27500000	1.48792668
12	•39699999	•54265862	2.80480693	•14400001	1.00626283
24	•13200000	.18398597	•81762405	•02000001	• 37462999
36	.02600000	.03543639	•15976368	•00300000	.03543639
, 0	*******	********	447710300	***************************************	• V2777027

• .	DIM NUMBER	utc T ooles	ENERGY SET	ANGLE SET	SLANT MFP	
	RUN NUMBER 697	HISTORIES 1 000	2	-2541	5.803650	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT	
	14,000000	1.000000	•000010	•	7.000000	:
SLAB CONFI	GURATION NEVA	DA TEST SITE S	OIL (50% SATURA	NTED)		•
2.5400	REG 2.5400	ION THICKNESS 2.5400	ES (CENTIMETE 5.0800	RS) 7.6200	10.1600	
30.4800	30.4800		3.0000	7.0200	10.1000	
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.,
ENERGY	NO. TRAN:	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.001000	.001065	•000097	.026000	.049556	.004531
2	.002000	.003728	•000314	.021000	.031390	.002646
3				•007000	.013250	.001533
4	.781000			.781000	.013761	.002556
5	.002000	.007360	•002103	.015000	.030592	.008741
6	.004000	.004542	•002012	.028000	.061926	.027424
7	.003000	.003956	.002260	•035000	.074406	.042518
8	.001000	.001011	.000621	.030000	.060680	.037275
9 .	.781000	.001843	•001343	.801000	.058146	.042364
10	.009000	.011522	.011192	.066000	.131761	.127996
	NUM	IBER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.004000	.015279	•010036	.020000	.076394	.039186
2	. 003000	.011459	•002516	.021000	.080214	.046548
3	.003000	.009549	•008504	.026000	.082760	.049245
4	.781000	2.485994	.007339	.501000	2.549656	.039822
5	.001000	.003183	.003903	.018000	.057296	.038891
6	.003000	.009549	.008517	.022000	.070.028	.038361
7	.002000	.006366	.005781	•017000	.054113	.045286
8	.001000	.001910	.001744	.025000	.047746	.045096
ğ	.002000	.003820	.005985	.028000	.053476	.058647
10	.781000	1.491597	••••	.791000	1.510695	.046814
11	.001000	•001910	.000429	019000	.036287	.069914
12	.001000	.000477	.000807	.029000	.013846	.044509
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	T+AN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•026000	.022943	•003000	.023000	.035027	.019943	
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
264000	.525467	.297582	006842	.919175	303000	
		MEAN ENERGY		MEAN ENERGY		•
		SCAT .TR.NT.	4	REFL. NT.	W 18	
7006 802618		5,72063		3,62851		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET

		SHEDON AT BE	EXON PRE IN	ENERGY CRRC	•.
INCHES	ERED FLUX PER N	LEGIKON AL KEI	3 3 10N 8020 IN 1	ENERGY GRPS.	5
Inches	•04368001	•04809353	•02797353	•02288099	•03602554
1	.07643017	•07725201	.01975442	•04237273	.06482909
Ž	.09797494	.09744690	.08236064	.06353388	.09385540
3	.14287664	.08762761	.06622971	.04753297	.07082268
5	.14666791	.13706644	•09210878	•06760790	.08201964
8	.16157418	•12491924	•07366511	•04298761	•05565975
12	.15674989	•11055583	•04771549	•06091830	•05018110
24	•04466546	•05552915	•01469924	•01499400	•02531447
36	•00142448	•01369795	•00142916		
INCHES	6	7	6	9	10
	•04143951	•10724600	•10012000	• 0426 9450	•14666699
1	.06841179	•14530021	•09744382	•07982763	•26896696
2	•08842509	•15187636	12622049	•12019376	•31698863
3	•09616007	•15772573	•11265739	•07325987	• 30635502
5	.16991863	•14733227	•10280011	•06723930	•35243193
8	.08879039	•10990598	•08300821	•10282090	•28619465
12	•07960153	•08522500	•06434451	•05545802	•21057787
24	.02738194	•01268761	•02377666	•02378233	•06165204
36	•00229668	•00210444	•00793727	•00113955	•01063802
			'acu		
	ERED FLUX TRANS		EGY. GRPS. V	S. THICKNESS	•
INCHES	1	2	3	•00107163	5 •00217259
2		•	•00738199	•01793576	.01408865
3		•01314581	•00929765	•00421947	•02148693 ·
5	•00830134	•02249673	•01716565	•01289147	•01620799
8 .	•02266624	•03874350	•01541273	•01503562	.02533984
12	.02866187	•03111682	•00801555	•01576150	•02620519
24	.01625919	•01989075	•00277408	•00610999	.00877088
36	.00142448	•01369795	•00142916		000011000
INCHES	6	7	8	9	10
1	•00703382	•01477092	•01597774	•01929765	•11532550
2	.02215626	.02632359	.04524627	•06005941	.18212859
3	.02138621	•05039358	.04182588	•03010791	.20019488
5	.04256272	.04898417	.04075214	.03155937	.24839312
8	.04260270	.04758354	.03430142	•06013340	.22542143
12	.03330035	•03255589	•04594167	•03452157	•16075833
24	•01095503	•00823399	•00837578	•01275187	.05476612
36	.00229668	•00210444	•00793727	•00113955	•01063802
		•			
- · - ·	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
-	1.00000000	1.15469441	8.08286087	1.15469441	1.73540430
1	•92400000	1.13404623	7.76609832	•95839637	1.89898520
2	.86000000	1.17090496	7.57811428	• 79558446	2.03446054
3	.77899999	1.05254352	6.70098430	•66048521	1.82173290
5	.67199999	•94426428	5.67727041 4.28991534	•45494960 •25980625	1.82014252
8	•52899999	•78704666 •54039104	2.70302923	• 12355230	1.04487985
12 24	•34999999 •11300000	•16158932	•68617729	•01270163	•31718453
36	•02500000	•04182225	•14871028	•00115470	•04182225

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET Ø	SLANT MFP 6.7014422	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	
	14.0000000	•8660300	•0000101	1.1546944	8.0828609	
SLAB CONFI	GURATION . NEV	ADA TEST SITE	SOIL (50% SAT	TURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		•
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
30.4800	30.4800			•		
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN-	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•0010000	•0010687	•0000977	•0220000	•0378282	•0034586
2	•0040000	•0130134	•0010969	•3260000	•0416504	•0035106
3	.0010000	.0010687	.0001237	•0140000	.0242259	•0028033
4				•0150000	•0198156	•0036801
5				•0190000	•0311992	.0089140
6	.0020000	•0019533	•0008651	•0260000	.0358879	•0158932
7	.0020000	•0017693	.0010110	•0500000	•0928783	• 05.30733
8	.0050000	•0070521	•0043320	•0390000	•0941968	•0578637
9	•0010000	•0010687	•0007786	•0250000	• 0369747	•0269387
10	•008000	•0092592	•0089946	•070000	.1270180	•1233889
	MUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	.0070000	•0133690	•0086408	•0390000	•0744844	•0396538
2	.0010000	•0019099	•0001721	•048000C	•0916730	•0519966
3	•0040000	•0076394	•0046098	•0390000	•0744844	•0327264
4	•0040000	•0076394	•0054058	•0410000	•0783041	•0478737
5				•0210000	•0401070	•0464080
6	.0020000	•0038197	•0039879	•0240000	.0458365	•0406440
7	.0010000	•0019099	•0002736	•0300000	•0572956	•0510589
8	.0030000	•0057296	•0083004	•0270000	•0515661	•0497791
9	•0020000	•0038197	•0016492	•0040000 •0100000	•0076394 •0190986	•0099790 •0662613
10				•0130000	•0248281	•0778196
11 12				•0100000	•0190986	•0578476
12				•010000	•0170700	,
(5+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRÁN. FACT.
•0250000	.0182996	•0010000	• 0240000	•0362533	•0172996	•0008175
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•3060000	.5416750	•2995244	•0071390	•9194314	•2960000	•3730000
		MEAN ENERGY		MEAN ENERGY		
		SCAT . TR.NT.		REFL. NT.		•
70.06805236		•4769011		•3266195	•	
. 4100007270						

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 699 14.00000000 .70711000 .00001010 2

SCATTE	RED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	i.	· 2	3	4	5
	•02369001	•03782852	•03102752	•01700404	• 04369054
1 .	.06839112	•07913690	•03723311	•03828776	•05714787
2	•07926531	•07815292	•04533952	•05220659	•08547693
3	•09926326	•08222301	•07386331	•07625425	•113244.84
5	•16636909	•07469272	•09407759	•05849777	.08540220
8	•22370211	•14592467	•07185750	•06764419	•06593082
12	•13936977	•09549776	•03178838	•05708586	•07198875
24	•03570094	•03612539	•02005553	•00929127	•00440708
36	•00515991	•			•00530629
INCHES	6	7	8	9	10
	•05308451	•07142402	•07719651	•08198200	•12854398
1	•07674932	•12504811	•08666323	•08220544	•30102884
2	•10564292	•13938793	•10136451	•08001185	•44972410
3 ·	•13345694	•16161155	, 13945844	•08149359	•43033930
5	•15074098	•17432170	•11254117	•08943362	•35321919
8	•11282184	•14063263	•09892041	•09245850	•31922158
12	•09186151	•09721562	•05700122	•06516169	•17231303
24	•00983044	•01427855	•01160367	•01305434	.03156359
36	•00360952	•00244338	•00322267	•00134071	.01011023
SCATTE	RED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	-		•	•00146643	•00105001
Ž		•00722695	•00111532	•00390649	• 00448345
3	•00276609	•01067816	•00252763	•01215224	•01337519
5	•01649767	•00381127	•01342065	•01163921	•02320804
8	•03570530	•03110695	•02175554	•01651945	.01748215
12	•04022816	•03238915	•01393318	•01898392	•01885593
24	•00977213	•01379718	•01171227	•00327721	•00339122
36	•00515991	002317120	**********	***************************************	•00530629
50	***************************************				***************************************
INCHES	6	7	8	9	10
1	.00650280	•02897473	.01813674	•01245851	.17859822
2	.01855888	•03147631	•02975885	•02696235	•30339601
3	.02474834	•03609022	•06332927	•03809501	•32609522
5	.04449057	•07526254	•03623070	•04401012	.28673366
8	.04113754	.05003189	.05315920	.05120193	.26321184
12	.03235138	.05704438	.03379232	.03328180	.14839550
24	.00705256	•00635299	.01015589	.00921024	.03156359
36	•00360952	.00244338	•00322267	•00134071	.01011023
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
111 -11-0	1.00000000	1.41420712	9.89944987	1.41420712	1.96988898
1	•91100000	1.37289631	9.40988046	1.12570888	2.07760057
2	•82800000	1.32349193	8.85778973	•89660733	2.07780097
3	•76199999	1.24403196	8.01548167	•71417461	2.10538307
5	•63599999	1.00785072	6.07222582	•45254628	1.81184231
8	•48599999	•80899914	4.36934581	•22768736	1.56680159
12	•32399999	•51976497	2.42476783	•09050925	•96979284
		•11194211	•42972368		_
24 36	•07600000	•03119271	•12526661	•00565682	•19156764
50	•01900000	• 434476 / 1	• * F 3 F 0 D D T		•03119271

•	RUN NUMBER 699	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 8.207563	
	INC. ENERGY 14.000000	COS. THETA .707110	CUTOFF EGY	INC.FLX/NT 1.414207	INC.DSE/NT 9.899450	. *
SLAB CONFI	GURATION NEVA	DA TEST SITE S	OIL (50% SATUR	ATED)		A## Y
		ION THICKNESS	1			,
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.004000	.003705	•000339	.016000	.016751	.001532
2			•	.023000	•026749	.002255
3				.018000	.021940	.002539
4				.011000	.012024	.002233
5	.002000	•005570	•001592	.021000	.030894	.008827
6	.002000	.002260	•001001	.026000	.037537	.016623
7	•002000	•001595	•000911	•037000	.050505	.028860
8	.001000	.004183	•002569	.040000	.054586	.033532
9	.001000	•000873	•000636	.041000	.057970	.042235
10	•007000	•007503	•007289	•058000	.090895	.088298
	NUM	BER OF SCATTE	RED NEUTRONS	V5 . · ANGLE		
· ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.004000	.007639	.002381	.054000	.103132	.038940
2	. •001000	•001910	.000152	•039000	.074484	.034261
3	.001000	•001910	•001619	•042000	.080214	.032482
4	.005000	•009549	•006142	•036000	.068755	.030085
5	•001000	•001910	•002575	•022000	.042017	.033000
6	.002000	•003820	•001931	•017000	.032468	.024841
7				•024000	•045836	.043022
8	•003000	•005730	•005391	.024000	.045836	.031527
9				.005000	.009549	.025573
10	.001000	•001910	•002282	•012000	.022918	.062318
11				•005000	•009549	•027616
12	.001000	•001910	•004907	.011000	.021098	.049743
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•019000	.014336		•019000	.025689	•014336	0.00658
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.291000	.399851	.226933	0,06644	•926970	•318000	.372000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		

Y

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 700 14.00000000 .34202000 .00001010 2

	CCATTER	EN ELLIV	nëp	NELITRAN	A T D	EGION	BDC.	1 61	ENERGY GRPS.	
	INCHES	ID FLUX	PER	2	M.I. IN	EGION	3	114	4	5
	Inches	•03240	0404	•055	56301		27377	703	•03278656	03818353
1	•	.0690		.0863			51831		•04629487	•07713829
2		.1092		•0964	1679		51466			•05629195
3		.1398	5883	• 0942	23508	• (66496	521	•08975838	.08769357
5		.1705	8082	•1060	8934	• (82309	507	•06178077	•05745425
8		.1325	5602	•1200	2839	• (50539	959	•04948220	•05951827
12		•1107	7300	• 0543	37433	• ()42692	262	•02064238	•05808693
24	•	•0272		•0036	59517		002102	-	•01149847	•00510283
36		•0029	0180			• (001175	86		
	TAICHES			7					9	1.0
	INCHES	•0880	2001	•118	12602	۱ .	8 110864	. 6.1	•12670302	10 •38429349
1		1433	- 1	•1438			40008	_	•13470341	•56117278
2		.1359		.1338	-		151579		•15071169	•53527517
3		.1357		.1579			34308		•14289678	•51540435
5		.1740		.1254			10393		•13274712	• 33315054
8		.0848		•0898	-		72592		•10760375	•23236472
12		.06869		•0728			42308		•01966707	•10138126
24		.0048		.0114			06617		•00986400	•01242184
36								•		
		ED FLOX	IRAN	NS. PER N 2	41 . T	N EUT	3	>• \		
1	INCHES	1		2			203598	142	•00253679	5 •00411150
2		.00269	0444	•0050	7144		005216	_	•01055615	• 00552459
3		•0156		•0129			10174		•01263042	• 00630784
5		.0143		•0153			13609		•01480189	•01670050
8		.0203		.024			19483	_	.01601633	•02331167
12		.0309		•0134			20328		.00712965	•01256592
24		.0115		•001			002102		.00238917	•00399150
36		•0029					001175			
_		_								
	INCHES	6		7			8		9	10
1		•0229	2420	•037	54621	• (26331	152	•03847502	28368881
2		•0421		•0472			58957		•063 08609	• 37573166
3		•0476		•050			056492		•05814719	•38350516
5		•05399		•0683			06490		•05802539	• 27048643
8		•0336		•050			145669	-	•05825739	•17867421
12		•0258		•033			28819		•01596662	• 08566848
24		•0012	1120	•0053	37811	. •(004344	•07	•00462723	01242184
36	•									
	•	TOTAL NO	0.	TOTAL F	FLUX	TOTA	AL DOS	SΕ	UNC.NO.FLUX	TTL.FLX/NT.
		TRANS . /		TRANS.	/NT.	TRAI	45./N1	Γ.	TRANS./NT.	REGION BDS.
		1.00000	0000	2.9238	B0562	20.4	466639	737	2.92380562	3.84953238
1		.8040	0000	2.2436	56719	15.	289413	376	1.82445472	3.27821559
2		•6669	9999	1.7536	-		508074		1.13736038	2 • 61684923
3		•5629		1.3638			599211		•71048475	2 • 27490134
5		•4209		•8654			932532		.27483775	1.62884098
8		.2849		•5369		_	54485		•06724751	1.06661231
12		•1740		•283	-		15460		•00877143	•60024526
24		•0320		•0496			17314	-		• 09489442
36)	•0030	0000	•0040	07767	• (002919	745		• 00407767

	RUN NUMBER 700	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 16.968745	
	INC. ENERGY 14.000000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC .DSE/NT 20.466639	•
SLAB CONFI	GURATION NEVA	DA TEST SITE SO	DIL (50% SATUR	ATED)		
•	REG	ION THICKNESS	ES (CENTIMETE	ERS }		
2.5400 30.4800	2.5400 30.4800	2.5400	5.0800	7.6200	10,1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.002000	.001021	.000093	•017000	.011083	.001013
2		_		.027000	.019004	.001602
3	•001000	•000422	•000049	.013000	.009363	.001083
4				•013.000	.011214	.002083
5				.021:000	.013059	.003731
6 7				.041000 .058000	.030108 .040401	.013333
8				•050000	.037918	.023087 .023292
9				•057000	.043335	.031573
10				•139000	131436	•127681
<u>-</u> .	NUM	BER OF SCATTÉ	RED NEUTRONS		•	
	_					
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS 1	FACTOR •001000	FACT/STER	FACT/STER •000061	FACTOR •060000	FACT/STER .114591	FACT/STER .024358
2.	.001000	.001910 .001910	•000093	.044000	.084034	•01967
3	•001000	•001910	•000073	.059000	.112681	.026474
4				•052000	.099312	.026705
5				.026000	.049656	.020049
6				.037000	.070665	.029466
7				.035000	.066845	.026300
8	.001000	.001910	.000117	.040000	.076394	.034784
9				.017000	.032468	.042418
10				.018000	.034377	•047469
11				.017000	.032468	.043980
12				.031000	.059205	.094678
(\$+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN'. FACT.	TRAN. FACT.	TRAN. FACT.
•003000	.000142		.003000	.001443	.000142	•
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.436000	.346921	.228478	214356	.856427	.282000	.279000
		MEAN ENERGY		MEAN ENERGY		
f		SCAT . TR . NT .		REFL. NT.		
7006.805236		0,01867		460985	•	

SLAB CONFIGURATION NEVADA TEST SITE BOIL (100% SATURATED)

SCATT INCHES	ERED FLUX PER 1	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	5
•	.19735871	•03891371	•1919:1264	•05841806	•07674922
1	.35922048	•07877981	•44269673	•12953555	.29927577
2	.39900768	•10983590	•40814213	•16633012	.24787137
3	•37497982	•07572209	•37154935	•11558485	.18521727
5	.28418769	•03262158	•17969229	•02781701	.08803203
8	.08067091	•02603661	•03612414	•00644688	•00696610
12	•01869035	•00129088	•00599910		
18				•	
2.4					
INCHES		7	•	9	••
INCHES	6 •18303659	•	8	7	10
1	•34023677				
2	•25944452				
3	.12567194			•	
5	•05448708		•		
8	•00351573				
1.2	***************************************				
18					*
24					
SCATT	ERED FLUX TRAN	S. PFR NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	.03891508	•01726755	•15687469	•06140501	.20131926
2	.08333745	•03933230	•19617136	.09832590	.18431656
3	.13292033	.03878813	•17211657	.08938451	•14506751
5	•14089306	.02252827	•12549346	•02046875	•06946554
8	.04869236	.01069854	.03456750	•00644688	•00696610
12	.01435259	.00129088	•00477336		***************************************
18					
24					
		<u></u>	_	_	_
INCHES	6	7	8	9	10
1	•22965298				
2 3	•21989011				
<i>5</i> 5	•10802643 •03838486				
8	•00351573				
12	•00391373		•		
18					
24					-
- T		•			•
	70741	TOTAL 5:	TOTAL 0005	11915 415 50 400	
THELES	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS - /NT -	TRANS./NT.	TRANS./NT. 1:09999999	TRANS./NT.	REGION BDS.
1	1.00000000 .81899999	1.00000000 1.13943457	1.09999999	1.00000000 .43399999	1.71920780
2	•65499999	1.01037368	•81314193	•18900000	2.08374512 1.77963172
3	49399999	•76830348	•57172479	•08200001	1.33072533
5	•26199999	•43223394	•29613729	•01500001	•68183768
8	•07100000	•11188713	•07233710	•00100001	•16076038
12	•01400000	•02041683	•01311192	***************************************	•02598033
18					142770033
24					
→ ·					,

•	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MEP 20.002488	
	INC. ENERGY	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 1.100000	•
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 801L (100%	SATURATED)		
•	. REG	ION THICKNESS	ES (CENTIMETE	RS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.620 <u>0</u>	10.1600	•
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX	DOSE TRAN. FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1 .				•112000	.197359	.116621
2				•022000	.038914	.021933
3 4				.108000 .030000	.191913 .058418	.102935 .031333
5				•043000	•076749	.049538
6.			•	.081000	.183037	.151421
7 8 9 10		•				
	NUM	BER OF SCATTE	RED NEUTRONS	VS - ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				•035000	.133690	.080889
2				.039000	.148969	.097974
3				•031000	•098676	.069927
4 5				.028000 .035000	.089127 .111408	.066212 .087148
6				•030000	•095493	.080358
7				•025000	•079577	.067604
8			•	.048000	.091673	.091341
9				•036000	.068755	•079282
10				•027000	.051566	.069955
11				•027000	.051566	.088981
12			•	.035000	.016711	.065778
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .396000	NO. FLUX REFL. FACT. .746389	DOSE REFL. FACT. .473782	ENERGY REFL • FACT • QQ9377	ENERGY ABS. FACTOR .906222	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .604000
		MEAN ENERGY	•	MEAN ENERGY		
_		SCAT .TR.NT.	•	REFL. NT.		
1102.202618			•	.002368		

SCATT	ERED FLUX PER A	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	. 4	5
	•15756303	•04911502	•19903751	•07597149	•08999297
1 '	.31311235	•08488969	•42320339	•17990398	• 30449764
2	.43646147	•11283728	•40763395	•13815038	•20012875
3	.48859079	•09014993	•41369950	•10464079	•18204766
5	•24150178	•04682834	•16020950	•03798477	•06475409
8	.11145518	•01299327	•04643352	•00600695	•00127104
12	•01739574	•00136177	•00405653		
18				*	
24					
INCHES	6	, 7	8	9	10
	·22930801				
- 1	•37340179				
2	•23269587				
3	.12365235				
5	.04369258				
8	•00117067				
12					
18					
24					
SCATT	ERED FLUX TRANS	S. PER NT. IN	EGY. GRPS. V.	S. THICKNESS	
INCHES	1	2.	3	4	5
1	•04422887	•01467205	•09879466	•10593630	• 20294512
2	•11667283	•03560092	·20701296	•10659874	•16177662
3	•15619909	•04922763	•20863262	•06053875	• 13626531
5	•13797639	•02898023	•08597321	.03319888	• 04610845
8 .	•07528182	•00970258	•02427751	•00600695	•00127104
12	.01237148	•00136177	•00405653		,
18		•			
24				•	
INCHES	6	7	8	9	10
1	.24102420	•	J	•	••
2	.18383115				
3	.11426767				
5	.04114752				
8	.00117067				
12	***************************************				
18					
24					
-					
140000	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.15469441	1.27016384	1.15469441	1.93058494
1	.79199999	1.14869446	1.02986954	•44109326	2.12010211
2	.61799999	•98007862 78863036	•76934662	•16858539	1.69649309
3 5	•48799999 •2359999	•78863926 •38363334	•57219755 •26316132	•06350819	1.46628922
8	•23599999 •06700000	•38262224 •11771057	•26314132 •07493899	•00923756	•60420863 •17933063
12			•01130753		
_	•01100000	•01778978	•01130133		.02281403
18 24					
47					

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 23.096761	
	INC. ENERGY	COS. THETA .866030	CUTOFF EGY	INC.FLX/NT 1.154694	INC.DSE/NT 1.270164	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 801L (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)	•	
2.5400 15.2400	2.5400 15.2400	2.45400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .093000 .027000 .114000 .033000 .047000 .097000	NO.FLX.REFL FACTOR .136454 .042535 .172372 .065794 .077937 .198588	DOSE REFL. FACTOR .0806:32 .0239:74 .092454 .035289 .050304 .164286
9 10			-			
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
ANGULAR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12 (S+U) NO•	FACTOR	FACT/STER	FACT/STER	FACTOR	NO. REFL. FACT/STER .129870 .106952 .093583 .112681 .057296 .057296 .076394 .064935 .030558 .011459 .013369 .030558	FACT/STER
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER REFL: FACT: -411000	NO. FLUX REFL. FACT. .693680	DOSE REFL. FACT. .446941	ENERGY REFL. FACT. Q10925	ENERGY ABS. FACTOR .890739	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .589000
1102.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q02658		

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CUTOFF EGY.
              RUN NUMBER
                            INC.ENERGY .
                                          COS. THETA
                                                                      ENERGY SET
                 575
                              ·10000000
                                            •70711000
                                                          .00001010
                                                                          2E
  SLAB CONFIGURATION
                        NEVADA TEST SITE SOIL (100% SATURATED)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                               3
                                                                            5
                .19809053
                              .03457902
                                            .21747701
                                                          .11655651
                                                                        .15248648
                .37096018
                              .08460625
                                            •43013380
                                                          .18681909
                                                                        -28765484
 2
                .48765017
                              .08271763
                                            •47850051
                                                          .13955662
                                                                         .23822194
 3
                -40831694
                              .09255703
                                            .34235863
                                                          .07725963
                                                                        .10563618
 5
                .21814086
                              .03892475
                                            .13499727
                                                          .02384573
                                                                        .01538162
 8
                .07183694
                              .00580107
                                            .02718014
                                                          .00573395
                                                                        .00135721
12
                .01037370
18
24
  INCHES
                                                                          10
                .20147650
                .38102904
 2
                .19499080
 3
                .10093768
 5
                .02182878
 8
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                               3
 1
                .04003269
                              +01573825
                                            .18334062
                                                          .08565987
                                                                        .19662306
                .10581517
 2
                              .03465104
                                            .27224385
                                                          .10241422
                                                                        .16552061
 3
                .15567625
                              •05668190
                                            .18555475
                                                          .06714010
                                                                        .08641501
                .12683926
 5
                              .02304654
                                            .10261525
                                                          .02384573
                                                                        .01298063
 8
                .05714788
                              .00172913
                                            .01789016
                                                          .00235405
                                                                        .00135721
12
                .00888681
18
24
  INCHES
                   6
                                                             9
                                                                          10
                .29982810
 1
 2
                .15907627
 3
                .09072534
 5
                .01909316
8
12
18
24
              TOTAL NO.
                            TOTAL FLUX
                                          TOTAL DOSE
                                                        UNC.NO.FLUX
                                                                      TTL.FLX/NT.
  INCHES
              TRANS./NT.
                            TRANS./NT.
                                          TRANS./NT.
                                                        TRANS./NT.
                                                                      REGION BDS.
               1.00000000
                             1.41420712
                                           1.55562783
                                                         1.41420712
                                                                       2.30355421
                .75099999
                             1.25679839
                                           1.11399333
                                                          ·43557579
 1
                                                                       2.17677901
 2
                .57399999
                                            .73915843
                              •97265663
                                                          .13293548
                                                                       1.75457314
                .41999999
 3
                              .68320537
                                            •48317095
                                                          .04101201
                                                                       1.16807811
 5
                -19599999
                              -31124899
                                            -20326252
                                                          .00282841
                                                                        •45594741
 8
                .04900000
                              .08047843
                                            .05092030
                                                                        .11190931
                .00600000
12
                              .00888681
                                            .00560375
                                                                        .01037370
18
```

24

		•	, (
	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET 0 ∳	SLANT MFP 28.287661	
	INC. ENERGY .100000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 1.555628	
SLAB CONFI	GURATION NEV	ADA TEST SITE	801L (100%	SATURATED)	,	
2.5400 15.2400	REG 2.5400 15.2400	ION THICKNESS 2.5400	ES (CENTIMETE 5.0800	7.6200	10.1600	
	, NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .102000 .018000 .119000 .052000 .064000 .093000	NO.FLX.REFL FACTOR .140072 .024451 .153780 .082418 .107825 .142466	DOSE REFL. FACTOR .082770 .013782 .082482 .044206 .069596 .117858
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	,	
ANGULAR SECTORS 1 2 3 4 5 6 7 7 8 9 10 11 12 (S+U) NO.	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .080000 .041000 .041000 .061000 .029000 .045000 .045000 .012000 .013000 .025000 SCAT.NO.FLX	NO. REFL. FACT/STER .152788 .089763 .078304 .116501 .055386 .080214 .087853 .085943 .022918 .013369 .024828 .047746	DOSE REFL. FACT/STER .066906 .048949 .042950 .063160 .048428 .073944 .076859 .076859 .072185 .066882 .036818 .063832 .123452 SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN - FACT -
NUMBER REFL. FACT. .448000	NO. FLUX REFL. FACT. .651012	DOSE REFL. FACT. •410694	ENERGY REFL. FACT. Q11722	ENERGY ABS. FACTOR .882770	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .551000
1102.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q02617		

```
CUTOFF EGY.
              RUN NUMBER
                            INC.ENERGY
                                          COS. THETA
                                                                       ENERGY SET
                              ·10000000
                                             .34202000
                                                           .00001010
                                                                           2Ē
                  576
  SLAB. CONFIGURATION
                        NEVADA TEST SITE SOIL (100% SATURATED)
      SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                                3
                                                           .15677948
                              .03444702
                .15715053
                                             .29080949
                                                                         .31375850
                .30104147
                              .06030085
                                            .37416722
1
                                                           .15213005
                                                                         .27268273
 2
                                                                         .18381225
                .36291494
                              .08345666
                                             .32777114
                                                           .11633302
                              •06111993
3
                .30515366
                                             .22271306
                                                                         .10900431
                                                           .06065644
 5
                .17065709
                              .03176630
                                             .08777658
                                                           .01958048
                                                                         .01854580
 8
                .04168235
                              .00279211
                                             .01416021
                                                           .00114545
                              .00121724
12
18
24
  INCHES
                   6
                                 7
                                                8
                                                              9
                                                                           10
                .38240500
                .32662739
 1
                .12671509
 3
                .06381907
5
                .00133422
 8
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                 2
                   1
                                                3
                .03582931
                              •00928109
                                             -18085662
                                                           .08609160
                                                                         .21169110
 1
 2
                .12107438
                              .04055992
                                             +20541599
                                                           .08290588
                                                                         .14747453
3
                .14399274
                              .02762426
                                             .14975706
                                                           .04483201
                                                                         .09749390
5
                .09750810
                              .02122438
                                             .05549613
                                                           .01291077
                                                                         .01854580
 8
                .03221220
                              .00100608
                                             .01184894
                                                           .00114545
                              .00121724
12
18
24
  INCHES
                                 7
                                                                           10
                   6
                .27981659
 2
                .11396456
                .04202575
3
 5
                .00133422
8
12
18
24
                                           TOTAL DOSE
                                                        UNC.NO.FLUX
                            TOTAL FLUX
                                                                      TTL.FLX/NT.
              TOTAL NO.
  INCHES
              TRANS./NT.
                            TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                       REGION BDS.
                                                          2.92380562
               1.00000000
                             2.92380562
                                           3.21618617
                                                                        4.20564909
                                             .89976581
                                                           .25437111
                                                                        1.74132079
1
                             1-05793741
                .54299999
2
                .40799999
                                             .51709833
                                                           .02046664
                                                                        1.22146974
                              .73186190
 3
                                             .33775213
                .29299999
                              .50572572
                                                                         .82246647
5
                                             .13053489
                                                                         .32966047
                .13400000
                              .20701941
8
                .03100000
                                             .02852390
                                                                         .05978012
                              .04621268
12
                                             .00077121
                .00100000
                              .00121724
                                                                         .00121724
18
```

24

	RUN NUMBER	HISTORIES 1000	ENERGY SÉT 2E	ANGLE SET Ø ∳	SLANT MFP 58.483387	
	INC. ENERGY	COS. THETA .342020	CUTOFF EGY .000010	INC.FLX/NT 2.923806	INC .DSE/NT 3.216186	,
SLAB CONF	IGURATION NE	VADA TEST SIT	E \$01L (100*	& SATURATED)		•
	REC	GION THICKNESS	ES (CENTIMETI	ERS)		r
2.5400 15.2400	2.5400 15.2400	2.5400	5 • 0800 °	7.6200	10.1600	
	NUM	MER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRÁN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL.	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1 2				·085000 •019000	.053749 .011782	.031761 .006640
3				.137000	.099463	•053348
4				.077000	.053622	.028761
5				.121000	.107312	.069265
6 7 8 9 10				.139000	.130790	.108199
,	NUM	IBER OF SCATTE	RED NEUTRONS	VS. ANGLE		•
ANGULAR SECTORS	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .077000	NO. REFL. FACT/STER .147059	DOSE REFL. FACT/STER .032908
2 .				.039000	.074484	.019836
3 4				•062000	.118411	.031649
5				.077000 .033000	.147059	•037467
6				•046000	.063025 .087853	.026827 .039460
7				.058000	.110772	•046044
8				.084000	.160428	.066823
9				.017000	.032468	•044573
10				.011000	.021008	.028767
11 12				•026000 •048 00 0	.049656 .091673	•060274 •134458
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
RAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
.578000	REFL. FACT. .456716	REFL. FACT 297974	REFL. FACT. .019235	FACTOR .807639	FACTOR	FACTOR •422000
100 00000		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT.		
102.205236				0.03328		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 577 .25000000 1.00000000 .00001010 2E

```
SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                  2
                                                3
                                                                             5
                   1
                .14600857
                               .03781712
                                             .16405516
                                                           .05765627
                                                                         .06683700
                .36227035
                              .06618856
                                             .33705552
                                                           .09213727
                                                                         .17862141
 1
                              •07501993
                .39395096
                                             -29920984
                                                           ·10364814
                                                                         .21367474
 3
                •33936786
                              .07694264
                                             .32495091
                                                           ·11326753
                                                                         .16262142
 5
                .24821510
                               .03576648
                                             .15191506
                                                           .03897567
                                                                         .04766530
 8
                .07379555
                               .01301668
                                             .06285791
                                                           .01832555
                                                                         .03176682
                                                           .00451103
12
                .01116223
                               .00371792
                                             .00726738
                                                                         .00163711
18
                .00142936
24
  INCHES
                                                              9
                                                                           10
                .06163400
                               .09400879
                                             .27381331
 1
                .12614029
                              -19618085
                                             •43419600
                .11849138
                              .18033804
                                             .29658363
 3
                .09669759
                               .13241859
                                             .17377494
                               .03811938
 5
                .03649199
                                             .04226882
 8
                .01582921
                               .01040423
                                             .00245224
                .00178133
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                   1
                                 2
                                                3
                .01905615
                                             .07971736
                                                           .03037491
                                                                         .10701891
                                                                         .08563732
                .05917240
                              .02615938
                                             •11933724
                                                           .04232937
                                             .13623020
 3
                                                           .05735372
                                                                         .10143890
                .11434453
                               .01844877
 5
                .10743639
                              .02551993
                                             .08913823
                                                           •02349799
                                                                         .02996994
 8
                .04470160
                               .01073254
                                             .02158180
                                                           .00613789
                                                                         .01549110
                                                           .00451103
                                                                         .00163711
12
                .00382616
                               .00371792
                                             -00284319
18
                .00142936
24
  INCHES
                   6
                                                                           10
                              .10833239
 1
                .07568625
                                             •24703703
                                             .22715485
 2
                •07360463
                               .12526753
                                             .13081524
 3
                .07956456
                              .09092118
 5
                .03252488
                              .02952518
                                             .03738334
 8
                .01079616
                               .01040423
                                             .00245224
12
                .00178133
18
24
              TOTAL NO.
                            TOTAL FLUX
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TTL.FLX/NT.
  INCHES
              TRANS./NT.
                            TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                       REGION BDS.
               1.00000000
                             1.00000000
                                           1.58750000
                                                          1.00000000
                                                                        1.86628435
 1
                .77299999
                             1.10022301
                                            1.42218858
                                                           •43300000
                                                                        2.22579024
                                                           .18799999
 2
                .62399999
                               •94666273
                                            1.07753335
                                                                        1.86891667
                                                           .08100000
                .49399999
                               .81011710
                                             •78667578
 3
                                                                        1.50104149
 5
                .25699999
                               .38999588
                                             ·31948935
                                                           .01500001
                                                                         .65441779
                                             .09152307
 8
                .07900000
                              ·12329756
                                                           .00100001
                                                                         .22944820
                .01200000
                                             .01216999
12
                              .01831674
                                                                         .03007701
18
                .00100000
                              .00142936
                                             .00089702
                                                                         .00142936
24
```

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SEŤ 254 i	SLANT MFP 20.062008	
	INC. ENERGY .250000	COS. THETA 1.000000	•00.0010	INC.FLŽ/NT 1.000000	INC.DSE/NT 1.700000	•
SLAB CONF	GURATION NEV	ADA TEST SIT	£ 801L (100%	. SATURATED)		
•	REG	ION THICKNESS	ES (CENTIMETE	ERS)	•	
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN.	NO. REFL.	NO.FLX.REFL FACTOR	DOSE REFL.
1 2				•086000	.146009	•055827
3			•	.022000 .077000	.037817 .164055	.013792 .056937
4				•027000	•057656	•020010
5				.044000	.066837	.027914
6				.029000	.061634	.032992
7				.044000	•094009	.066359
8 9 10				.138000	•273813	•225493
_	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		,
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	, ne i on	TACTY STER	TACITOTER	•040000	.152788	.076840
2				.043000	.164247	.086911
3				.042000	.133690	.078313
4				•036000	.114591	.077665
5				.046000	.146422	.097701
6 7				.039000 .029000	.124141 .092310	.102379 .069444
8				.046000	.087853	•079295
9				•044000	.084934	.087109
10				.032000	.061115	.074128
11				•020000	•038197	.061945
12				•050000	.023873	.078496
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
RAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
EFL. FACT. .467000	REFL. FACT. •901830	REFL. FACT. .499325	REFL. FACT. 016050	FACTOR •839493	FACTOR •001000	FACTOR •532000
		MEAN ENERGY		MEAN ENERGY	•	
		SCAT.TR.NT.		REFL. NT.		
702.202618				0.08592		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 578 .25000000 .86603000 .00001010 2E

```
SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS.
  INCHES
                                               3
                   1
                                                          .08334353
                                            .17424401
                                                                         .11192851
                .14674300
                              .02837103
                                            .29373890
                                                                         .17023841
                              .06547833
                                                          .10962481
1
                .29472230
                                                                         .16739084
2
                .35536311
                              .06562846
                                            .30111869
                                                          .08326940
                                                          .07369079
                                                                         .13932533
                                            .31144017
                .29801052
                              .07551169
3
                                                          .05989117
                                                                         .04498841
                              .04261195
                                            .18103507
 5
                .24360333
                .04965729
                              .01125563
                                            •04197509
                                                          .00659072
                                                                         .00999901
 A
                                            .00663260
12
                .00933737
                              .00216540
18
24
                                                                           10
  INCHES
                                               8
                              .10480349
                                            .29685401
                .04053651
                .08736907
                              .20085002
                                            .45903447
1
                                            -27000059
                .13528059
                              .16235168
                              .11012207
                                            .13939633
 3
                .11395991
                              +04940634
                                            .02592123
5
                .02399455
                                            .00338042
 8
                .00800482
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS
  INCHES
                                                3
                   1
                                                           .03934360
                                            .06513587
                              .01015824
                                                                         .06719053
                .04144196
 1
 2
                .05778698
                              •01578169
                                            .11493018
                                                           .03987654
                                                                         .08220905
                                                           .05402123
                                                                         .07750806
 3
                .08910565
                              .02224602
                                            .16877572
                                                           .03052542
                                             .09754782
                                                                         .03530859
                .11899862
                              .02841322
 5
                .02780243
                              .00544448
                                            .03338682
                                                           .00342625
                                                                         .00671188
 8
                                             .00473351
12
                .00526625
                              •00216540
18
24
                                                                           10
  INCHES
                                             .29497473
                .04090318
                              .10482593
                .08216659
                              .12175749
                                            .21751339
 2
                                             .11021419
                .08288846
                              .09014715
 3
                .02190453
                                             .01850624
 5
                              .04361179
                                             .00124285
 8
                .00800482
12
18
24
                                                        UNC.NO.FLUX TTL.FLX/NT.
                                          TOTAL DOSE
              TOTAL NO.
                            TOTAL FLUX
                                                         TRANS./NT.
                                                                       REGION BDS.
              TRANS . / NT .
                            TRANS./NT.
                                          TRANS./NT.
  INCHES
                                           1.83307737
                                                          1.15469441
                                                                        2.11723616
                             1.15469441
               1.00000000
                                                           .43993858
                                                                        2.12099488
                             1.10391261
                                            1.45436273
                .73999999
                                            1.01817814
                                                           .16743068
                                                                        1.70783403
                .57299999
                              .89945259
 2
                                                          ..06350819
                                                                        1.32496501
                              .75841468
                                             •71443051
 3
                .45599999
                                             .31344376
                                                           .00923756
                                                                         .68068960
                              •40405379
 5
                .24399999
                .05800000
                              .08601952
                                             .05718905
                                                                         .13086298
 8
                               ·01216515
                                             .00760611
                                                                         .01813537
                .00800000
12
18
24
```

			•			
	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 23.165488	
	INC. ENERGY .250000	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC.DSE/NT 1.962980	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 801L (100%	SATURATED)		
	DEG	ION THICKNESS	ES (CENTIMETE	PC 1		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .084000 .016000 .091000 .034000 .055000 .023000 .053000 .143000	NO.FLX.REFU FACTOR .127084 .024570 .150901 .072178 .096933 .035106 .090763 .257084	DOSE REFL • FACTOR •048591 •008961 •052371 •025050 •040484 •018792 •064068 •211717
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3 4 5 6 7 8	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .080000 .061000 .059000 .081000 .036000 .039000 .042000 .043000 .011000	NO. REFL. FACT/STER .152788 .116501 .112681 .154698 .068755 .074484 .080214 .082124 .021008	DOSE REFL. FACT/STER .069600 .070523 .065661 .089889 .065626 .070571 .078399 .068604 .071016
10 11				.016000 .017000	.030558 .032468	•098524 •090122
12				.014000	.026738	.059161
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL • FACT • •499000	NO. FLUX REFL. FACT. .854619	DOSE REFL. FACT. .470034	ENERGY REFL. FACT. Q17031	ENERGY ABS. FACTOR .829678	NUMBER ABS. FACTOR .002000	NO. CUTOFF FACTOR .499000
1702.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q08533		

```
RUN NUMBER
                             INC.ENERGY
                                           COS. THETA
                                                         CUTOFF EGY.
                                                                        ENERGY
                                                                               SE
                                             •70711000
                  579
                               .25000000
                                                            .00001010
                                                                           2E
  SLAB CONFIGURATION
                        NEVADA TEST SITE SOIL (100% SATURATED)
       SCATTERED FLUX PER NEUTRON AT REGION SDS. IN ENERGY GRPS.
  INCHES
                    1
                                                3
                                                                             5
                               .02785504
                .16641698
                                             -14416552
                                                            .06679451
                                                                          .14256151
 1
                .23619736
                               .06943462
                                             .26227352
                                                            ·11184375
                                                                          14354830
 2
                .31532596
                               .04835486
                                             .27800392
                                                            .12548196
                                                                          ·22554636
 3
                .33784275
                               .10316319
                                             .29843993
                                                            .09767798
                                                                          .14669682
 5
                 .17900855
                               .05557402
                                             • 18302729
                                                            02735168
                                                                          • 02041943
 8
                                                            .00583103
                .04464894
                               •01723017
                                             .04597201
                                                                          .00438861
12
                .00612906
                                             .00246831
18
24
  INCHES
                    6
                                                8
                                                               9
                                                                            10
                               .10088899
                .11687549
                                             .38410550
 1
                .15410219
                               .20049482
                                             •50004790
 2
                .10245671
                               •19111614
                                             .27832511
 3
                .07907034
                               .08910552
                                             .10888607
 5
                .03848630
                               .05459476
                                             ·02366786
 8
                .00730194
12
18
24
      SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS.
                                                           THICKNESS
  INCHES
                                  2
                    1
                                                                             5
                                                3
                .01509098
 1
                               .01237367
                                             .07003037
                                                            .03989619
                                                                          .05583870
 2
                .07502856
                               .02049705
                                             ·11991423
                                                            .05496278
                                                                          .09917146
 3
                .10486515
                               .04565855
                                             .16666691
                                                            .05555738
                                                                          .09242712
                                                                          •01429979
 5
                .08098644
                               .02611522
                                             .11358804
                                                            .02345374
 8
                .03004513
                               .00832967
                                             -02645746
                                                            .00583103
                                                                          .00438861
12
                .00445147
                                             -00246831
18
24
  INCHES
                   6
                                  7
                                                8
                                                               9
                                                                            10
 1
                .08234800
                               •11656561
                                             .32963170
 2
                •07337511
                               .14336975
                                             -20144632
 3
                .06538620
                               .07342444
                                             .09187319
 5
                .03259557
                               .03494767
                                             .01609379
 8
                .00400847
12
18
24
              TOTAL NO.
                            TOTAL FLUX
                                           TOTAL DOSE
                                                         UNC.NO.FLUX
                                                                       TIL.FLX/NT.
 INCHES
              TRANS./NT.
                            TRANS./NT.
                                           TRANS./NT.
                                                         TRANS./NT.
                                                                       REGION BDS.
               1.00000000
                             1.41420712
                                            2 • 24505380
                                                          1.41420712
                                                                         2.53325613
1
                .68599999
                              1.15452260
                                            1.52863637
                                                           .43274738
                                                                         2.11068985
 2
                .53199999
                               .92070074
                                             .99319582
                                                            .13293548
                                                                         1.69754648
 3
                .42899999
                               .73545675
                                                           .03959779
                                             .64398474
                                                                         1.30048041
 5
                .21199999
                               .34490867
                                             .26425625
                                                            .00282841
                                                                          .58495831
 8
                               .07906037
                .05300000
                                             .05150321
                                                                          .12537270
12
                               .00691979
                .00500000
                                             .00442573
                                                                          .00859738
18
```

24

	RUN NUMBER 579	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 28.371834	
	.1NC. ENERGY .250000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 2.404152	
SLAB CONFI	GURATION NEV	ADA TEST SITE	80IL (100%	SATURATED)	•	
2.5400 15.2400	REG 2.5400 15.2400	ION THICKNESS 2.5400	ES (CENTIMETE 5.0800	7.6200	10.1600	
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3 4 5 6 7 8 9	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .078000 .016000 .078000 .035000 .053000 .046000 .050000	NO.FLX.REFL FACTOR .117675 .019697 .101941 .047231 .100807 .082644 .071340 .271605	DOSE REFL. FACTOR .044993 .007183 .035379 .016392 .042102 .044239 .050357 .223675
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .070000 .068000 .065000 .071000 .035000 .049000 .011000 .015000 .015000 .025000 .029000	NO. REFL. FACT/STER .133690 .129870 .124141 .135600 .066845 .093583 .097403 .091673 .028648 .019099 .047746 .055386	DOSE REFL. FACT/STER .054969 .065630 .057445 .066797 .054690 .079213 .076750 .071028 .078612 .049949 .106194 .125507
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .536000	NO. FLUX REFL. FACT. .812939	DOSE REFL • FACT • •464321	ENERGY REFL. FACT. Q20890	ENERGY ABS. FACTOR •791093	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .463000
1702.205236		MEAN ENERGY SCAT . TR.NT.		MEAN ENERGY REFL. NT. Q09743		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 580 •25000000 •34202000 ·00001010 2E NEVADA TEST SITE SOIL (100% SATURATED) SLAB CONFIGURATION SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 1 2 3 4 5 .13736701 .02939254 .17638449 .08059751 .17175651 -22796598 .05044131 1 ·30773261 .15003371 ·16191897 2 .23733132 .05299744 .29964254 •07191344 ·12191552 .03680892 .17615431 3 .24073484 .05547077 .08594092 •03760098 .15329357 .01888383 .10100832 5 .03499484 8 .05752259 .00397474 .02227783 .00114545 .00685716 12 •00216540 .00163557 18 24 INCHES 7 9 10 ·11495002 •19603451 •48484302 1 .15484682 .20489864 .35864855 .07977785 2 .11839227 .16487615 3 .04539481 .06436747 .06915614 5 .01804651 .02458719 .00518704 8 .00180635 •00219244 12 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 1 3 .02309707 .00826896 .08923684 .06884539 .09234997 1 2 .07549941 .01183153 .13849625 .03667398 08354037 3 .03552310 .09468206 ·01156853 •11164043 .06124860 .02127131 5 .06718153 .08724536 .01282437 .02433745 8 .03833367 .00397474 .01625874 .00114545 12 .00386441 •00216540 .00163557 18 24 7 9 INCHES 6 8 10 .09408380 .15797948 .29786973 1 .09293338 .13115278 2 .06786638 .03551194 .04693412 -06158926 3 5 .01012873 .01847371 .00518704 .00219244 8 .00180635 12 18 24 TOTAL FLUX TOTAL NO. TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. INCHES TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. TRANS./NT. 4.64154142 2.92380562 1.00000000 2:92380562 4.22882197 .52699999 1.08317852 1.30714857 .25144728 1.86793389 1 .38399999 •65846073 •62932987 .02046664 1.16731316 3 .28799999 •45869803 ·38442667 .77402819 5 .14600000 .24664950 ·17370832 .39360228 8 .03900000 .06371139 .04245069 .08891939 ·00766538 .00494421 .01065813 12 ·00500000

18 24

·	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 58.657413	
	INC. ENERGY .250000	COS. THETA .342020	CUTOFF EGY •000010	INC.FLX/NT 2.923806	INC.DSE/NT 4.970469	
SLAB CONF	GURATION NEV	ADA TEST SIT	E SOIL (100 %	. SATURATED)		
	REC	ION THICKNESS	ES (CENTIMETE	ERS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	,
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .067000 .017000	NO.FLX.REFL FACTOR .046982 .010053	DOSE REFL. FACTOR .017964 .003666
3 4 5 6				.093000 .037000 .076000	.060327 .027566 .058744 .039315	.020937 .009567 .024534 .021045
7 8 9 10				.067000 .218000	•067048 •165826	.047328 .136563
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR	NO. REFL. FACT/STER	DOSE REFL.
1 2 3				.086000 .070 00 0 .072000	•164247 •133690 •137510	.033363 .032076 .030981
4 5 6 7				.074000 .043000 .052000	.141329 .082124 .099312 .116501	.033873 .031075 .036942 .049482
8 9 10				.077.000 .016000 .017000	•147059 •030558 •032468	.056729 .039319 .037365
11 12				•025000 •040000	.047746 .076394	.060388 .096230
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL: FACT. .633000	NO. FLUX REFL. FACT. .475861	DOSE REFL • FACT • •281604	ENERGY REFL. FACT. 026161	ENERGY ABS. FACTOR •738377	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .366000
1702.205236		MEAN ENERGY SCAT .TR.NT.		MEAN ENERGY REFL. NT. 010332		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 501 ·50000000 1.00000000 .00001010 2E SLAB CONFIGURATION NEVADA TEST SITE SOIL (100% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 .11144028 ·02991388 -14823650 .05705890 .06353392 .19733747 .04352792 ·17816278 .09023017 .12364000 2 -31597013 .04788516 -25289033 .08589688 -13683096 3 .24782054 .05757013 .21494642 .09740580 .14108471 5 .07440597 .25336678 ·19990560 .05017218 .07588355 8 .10882368 .02740566 .07428738 .02773939 .01434306 12 .01750348 .00935036 +00440813 .00452729 .00461518 18 .00136403 00644278 .00473243 .00656029 INCHES 6 7 A 9 10 .03385281 •05359580 .04101668 .16729051 .20666132 .08859424 .13819251 ·11113347 .20920869 .59501375 .08824907 .15370181 •09468320 .22456758 .39743094 3 .07419428 ·12754800 -11019858 .16601720 .28505305 5 .04016888 .03674185 ·03802593 .09207860 .08985227 8 .01586704 .02718093 .01042312 .02387517 .01554976 12 .00107878 •00546009 .00267240 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 1 3 4 1 .00688868 .00183352 •01938035 .02782482 .03362916 2 .03108347 .01031138 -06800257 .02200654 .04335625 3 .08092976 .02292044 .07742753 .04491779 .05449886 Ś .08993442 .03271591 11383857 .03014998 .04931602 8 .05270389 .01443424 .04579879 •01489504 .01028832 12 .01369952 .00376885 +00440813 .00452729 .00461518 18 +00111.050 .00656029 24 INCHES 6 R Q 10 .02813051 .03773616 .02995798 -10413477 •37201601 2 .03742602 .07741436 .04410190 .14035650 £28519601 3 .04496423 .05672086 .06420155 .12164594 .20613258 5 .03057013 .02448753 .02155087 •06611567 •07626067 8 .00643891 .01545045 .00880175 ·01718741 -01243183 12 .00107878 •00344652 .00267240 18 24 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 1.00000000 2.40000000 1.00000000 1.85271628 .80299999 1.09453197 2.25622182 •43300000 2-20804100 2 •64399999 •94625499 1.65103536 ·18700001 1.98510605 3 .52599999 .85535954 1,26283045 .08100000 1.60283871 .31999999 •54993977 .61371839

.18511093

.03104010

.00558195

•19943064

.03821667

.00767078

.12700000

.02700000

•00200000

12

18

24

.01500001

.00100001

•96560162

.34649519

.04961571

·	RUN NUMBER	HISTORIES 1 000	ENERGY SET	ANGLE SET	SLANT MFP 20.091766	
	INC. ENERGY .500000	COS. THETA 1.000000	CUTOFF EGY .000010	INC.FLX/NT 1.000000	INC . DSE/NT 2.400000	
SLAB CONFI	GURATION NEW	VADA TEST SIT	E SOIL (100%	SATURATED)		
	REG	SION THICKNESS	ES (CENTIMETE	RS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		,•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN-	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1				.059000	.111440	.030182
2				•017000	.029914	.007728
3				.076000	.148236	.036441
4				•027000	•057059	.014027
5				.033000	.063534	.018795
6				.018000	.033853	•012836
7				.037000	•053596	•026798
8		•		.023000	.041017	.023926
9				.071000	•167291	.125468
10				•108000	.206661	•189440
	, NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR.	FACT/STER	FACT/STER
1				.043000	.164247	.085246
2				.034000	.129870	.067238
3	•			.048000	.152788	.087922
4				•045000	.143239	.088225
5				•034000	.108225	.074394
6				.039000	.124141	•077039
7				.034000	.108225	•092726
8				•042000	.080214	.071792
9				•042000	.080214	.076182
10				.028000	.053476	•065842
11				•030000	.057296	•074741
12			•	•050000	.023873	.077630
(5+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
				ENEDE: 155		
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•469000	.912601	•485641	(710142	.838545	•001000	•530000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
2402.202618				0,17212		

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 582 .50000000 .86603000 .00001010 2E

			PER.	NEUTRON AT RE			
	INCHES	1		2	3	4	5
		•09376	-	•03647954	•12832246		•08783350
1		• 26637		•03711234	•22678973		•14841197
2		.27329		•04874566	•25911758		•13553950
3		.31247	_	•04434983	•28785754		•14589774
5		.24739		•03769315	•16050125		•06433828
8		•07288		•01774447	•07850490		•01236692
12		.00857	7193	•00558987	•02104326		•00102136
18					•00106819		
24							
		٠		_	_	_	• •
	INCHES	6		7	8	9	1.0
		•03390		•07215700	•07435503		•27658152
1		•10021		•14776422	•13797440		•60614052
. 2		•09600		•13149546	•09899504		•42754674
3		•10732		•09547741	•06159076		•27176573
5		•0345		•03991013	•03837892		•06696707
8		.01369	5450	•02498308	•01238847		
12					•00124908		
18							
24		•					
	CCATTED	ED ELLIV	TDA	NS. PER NT. IN	EGY GDDC	VS. THICKNESS	
	INCHES	1	IKAI	2 PER 1110 IN	3	4 4	· 5
		_	1016	2	•	•	_
1		•01150		. 01275012	•03258850		•04616889
2		•04358		•01275812	•06837704		• 06642348
3		.07122		•01381296	•10973416		•06691985
5		•07615		•01902820	•08175137		•03436326
8		•04498		•00654155	•03506445		•00898478
12		•00243	9998	•00454445	•02002953		•00102136
18	•				•00106819		
24	•						
	•			-	_	•	• •
	INCHES	6		7	8	9	10
1		•03326		•04838517	•04269165		•40121258
2		•02994	-	•07260950	•04239789		•32081916
3		•0718		•05172482	•03246923		•20627655
5		•02492		•02467086	•02858989		.05752118
. 8		•00870	1936	•01483569	•00913762		
12					•00124908		
18							
24							
						k.	*
		TOTAL ***		TOTAL EXILE	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
-		TOTAL NO		TOTAL FLUX	TRANS./NT.	TRANS./NT.	REGION BDS.
	INCHES	TRANS•/		TRANS./NT.			
		1.00000		1.15469441	2.77126658		2.05071864
1		•78599		1.17712640	2 • 37375431		2.49490748
2		•62899		•99986620	1 • 70029241		2.00823187
3		• 49699	-	•81102606	1.15510124		1.61241379
5		•28799		•42628368	•46963579		•80145578
8		•09100		•15182359	•13017653		• 26426665
12		•01500		•03069878	•01975573		.03888988
18		•00100	0000	•00106819	•00064092		•00106819
24	•						•

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET 0∳	SLANT MFP 23.199849	
	INC. ENERGY	COS. THETA .866030	CUTOFF EGY •000010	INC.FLX/NT 1.154694	INC.DSE/NT 2.771267	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 801L (100%	SATURATED)		
		ION THÍCKNESS			t	
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	NUM	IBER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .059000	NO.FLX.REFL FACTOR .081202	DOSE REFL. FACTOR .021992
2 3 4 5		;		.022000 .064000 .014000 .040000	.031592 .111131 .026303 .076066	.008161 .027320 .006466 .022503
6 7 8 9				.021000 .044000 .036000 .053000	.029361 .062490 .064394 .089407	.011133 .031245 .037563 .067055
10				.135000	.239528	.219567
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS	NO. TRAN. FACTOR	NO. TRAN.	DOSE TRAN. FACT/STER	NO. REFL.	NO. REFL. FACT/STER	DOSE RÉFL. FACT/STER
2		***************************************	· · · · · · · · · · · · · · · · · · ·	.089000 .072000 .055000	•169977 •137510 •105042	.072961 .081088 .061647
4 5 6				.074000 .027000 .034000	.141329 .051566 .064935	.086829 .052936 .048446
7 8				.037000 .047000	.070665 .089763	.071032 .089724
9 · · 10 11 12				.011000 .014000 .012000 .016000	.021008 .026738 .022918 .030558	.061513 .075699 .072397 .090904
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT.	SCAT. NO. TRAN. FACT.	SÇAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL - FACT - -488000	NO. FLUX REFL. FACT. .811475	DOSE REFL. FACT.	ENERGY REFL. FACT. 018259	ENERGY ABS. FACTOR .817407	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .512000
2402.205236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. Q18708		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET .50000000 .70711000 .00001010 2E

		50 '51 114	050				500	• • •		_	
		ED LLOX	PER		AIR	FGION		IN.	ENERGY GRP	5.	-
11	NCHES	1210	7001	2	27201		3		4	^-	5
	•	.1319	-		37201		1808		•027430		• 08493849
1		•2639	-		87258 54115		27572	-	•073377	_	• 09487723
2	•	•2638			54115		24590		•073255		• 14034567
3		•2420			72765		9902		•067530		•11543463
5		.1935			47137		3075		•039543		•09758135
8		.1127			12381)4479		-014180		.02865527
12		•0307	9033	•002	18568		2048		•004876	47	• 00639578
18						• (0439	533	•		*
24											
				_			_		_		
17	NCHES	6	7050	7			8		9		10
		•0606			70601		6228		•181736		• 34944602
. 1		•0943			63004		2561		• 269650	-	• 54884099
2		•1107			89930		7381		•194291		• 39543621
3		•0673			84871		6043		•183807	-	• 20470794
5		•0302		-	76256		4523		•051124		• 04096608
8		•0097	1295		38991	• (0740	269	•012453		•00463904
12				•002	76698				•001049	09	
18											
24				•							
			•								
		ED FLUX	TRAN		NT. I	N EGY		5. V		\$5	_
	NCHES	1		2		_	3		4		5
1.		•0051			22649		4041		•011136		•03568529
2		•0535			83528		4980		•020888		• 05364388
3		•0770	-		64810		8846		•033742	_	•05252028
5		•0836			72463		5150		•025828		• 06625334
8		•0484	2618	•006	70091	• (2969	114	•002025	84	•01830037
12	•	•0201	3083	•002	18568	• (0984	027	•002751	23	• 00639578
18						• (0307	977			
24											
	NCHES	6		7			8		9_		10
1		•0364	2130 ⁻	•062	19267	• (3733	447	• 097567	65	•40218294
2		•0480		•072	14700	• (3575	582	•107610	41	.31561511
3		•0467	2890	•059	58149	•(3051	445	•101004	42	•18484388
5		•0244	1300	•031	94591	•(2531	834	•039747	19	.03983419
8		.0046	6424	•013	29392	• 6	0589	918	•010812	62	•00463904
12				•002	76698				•001049	09	
18	*										
24											•
											•
	,										
		TOTAL N	-	TOTAL			AL DO		UNC.NO.FL		TTL.FLX/NT.
I	NCHES	TRANS./		TRANS.			15./N		TRANS./NT	-	REGION BDS.
		1.0000		1.414			39409	_	1.414207		2.49231962
1		•7129		1.164			35278		•432747		2.40368220
2		•5489			42845		2926		•131521		1.80360560
3		•4289			68716		2115		•039597		1.31559839
5		.2489	9999	•407	04851		¥2215	-	•002828	41	•69903224
8		•0970	0000	.144	45345	• 1	12582	742			•27106958
12		-0290	0000	•045	11987	•(3171	046			.06854516
18		.0010	0000	•003	07977	•0	00184	786			.00439533
24											

·	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 28.413918	
	INC. ENERGY .500000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 3.394097	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 30IL (100%	SATURATED)	•	
•	REG	ION THICKNESS	ES CENTIMETE	ŔS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
•	NUM	IBER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY GROUPS 1 2	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .059000 .010000	NO.FLX.REFL FACTOR .093317 .009455	DOSE REFL. FACTOR .025273 .002443
3 4 5 6 7				.061000 .016000 .045000 .026000	.083501 .019396 .060061 .042907 .075453	.020527 .004768 .017768 .016269 .037726
8 9 10				.031000 .083000 .161000	.044041 .128508 .247097	.025691 .096381 .226505
	NUM	IBER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12 (S+U) NO•	NO. TRAN. FACTOR (S+U) DOSE TRAN. FACT.	NO. TRAN. FACT/STER UNSCAT.	DOSE TRAN. FACT/STER SCAT. NO. TRAN. FACT.	NO. REFL. FACTOR .076000 .059000 .071000 .084000 .039000 .027000 .044000 .066000 .019000 .021000 .026000 SCAT.NO.FLX TRAN. FACT.	NO. REFL. FACT/STER .145149 .112681 .135600 .160428 .074484 .051566 .084034 .126050 .036287 .021008 .038197 .049656 SCAT. DOSE TRAN. FACT.	DOSE REFL. FACT/STER .057169 .051849 .070972 .080353 .064800 .041268 .068367 .101772 .083941 .052189 .107040 .124314 SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT.	NO. FLUX REFL. FACT. .803737	DOSE REFL. FACT.	ENERGY REFL. FACT. 022394	ENERGY ABS. FACTOR .776052	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .458000
2402.205236		MEAN ENERGY SCAT .TR.NT.		MEAN ENERGY REFL. NT. 020659		:

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 584 .50000000 .34202000 .00001010 2E

	ERED FLUX PER M				
INCHES	1	2	3	4	5
	•11716198	•02073355	•11570150	•05582848	•07157303
1	•24196516	•03644099	.22648795	•07710660	•13409325
2	.22286082	•04840974	•23462742	.05333710	•11930648
3	.23164629	•04947722	•19516640	•05948737	•10483691
5	•13492948	•03116063	•10183076	•02565684	•02310002
8	•05503261	•01215978	•03227403	•00.116693	•01675640
12	•01386385		•00120366	,	
18	.00232501				
24					
	•	•			
INCHES	6	7	8	9	10
	•07516050	•10801250	•08414201	•20270800	• 55587499
1	•07228203	•14320268	•11739993	•25492637	•63402282
· 2	.06483598	•12149578	•12794986	•17563976	•21281327
3	.06180894	.05221133	•05970527	•10350270	•07832370
5	.01967592	•02395464	•00932301	.03431215	•
8	.00434725	•00391537	.00132837	•00567847	
12	00129868		•00144139		
18					
24					
	•				
			SCH CDDC H		
	ERED FLUX TRANS		EGY. GRPS. V		£
INCHES	1	2	3	4	5.
1	•00817164	•00644644	•05099876	•02529849	•04186828
2	•04323774	•00864224	•09249319	•01913745	•06348108
3	•07451780	•01251340	•10756314	•03131075	•06090767
5	•07488661	•01949534	•06924965	•01816022	•02206978
8 ·	•03673086	•00882979	•03093105		•00541531
12	•00849347		•00120366		
18	•00232501				
24					
		_	•		• •
inches	6	7	8'	9	10
1	.03131213	•07616214	•051.10226	•13355874	•46157670
2	.04686212	•07245989	•05539957	•11386228	•18135672
3	•03934264	•05116598	•03520995	•06421662	• 06694238
5	.01337487	•01894370	•00932301	•03431215	•
8	.00278493	•00391537	.00132837	•00567847	
12	•00129868		•00144139		•
18					
24					
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
_	1.00000000	2.92380562	7.01713350	2.92380562	4.27423886
1	•55899999	1.13794287	2.16988804	•25144728	2.18937506
2	•40599999	•71739892	1.02158557	•02046664	1.40174286
3	•30699999	•54369033	•59909203		•99616614
5	.16700000	.27981532	•23942501		• 40394346
8	•05700000	•09561416	•07054361		.13265921
12	.01000000	•01243721	.00981520	•	•01780758
18	.00200000	•00232501	•00155930		•00232501
24			,		

•	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 58.744419	
·	INC. ENERGY	COS+ THETA -342020	CUTÓFF EGY	INC.FLX/NT 2.923806	INC .DSE/NT 7.017133	
SLAB CONF		ADA TEST SIT			7.017133	
* , a	DE (SION THICKNESS	SE /CENTIMETE	Pe)	•	
2.5400 15.2400	2.5400 . 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS 1 2 3	NO. TRAN. Factor	NO. FLUX Tran.Factor	DOSE TRAN. FACTOR	NO. REFL. FACTOR .067000 .012000 .069000	NO.FLX.REFL FACTOR .040072 .007091 .039572 .019094	DOSE REFL • FACTOR •010853 •001832 •009728 •004694
5 6 7 8 9				.035000 .039000 .047000 .036000 .080000	.024479 .025706 .036942 .028778 .069330	.007242 .009747 .018471 .016787 .051998
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR SECTORS 1 2 3 4 5 6 7 7 8 9 10 11 12 (S+U) NO•	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER SCAT. NO.	NO. REFL. FACTOR .088000 .070000 .081000 .092000 .038000 .049000 .065000 .089000 .018000 .019000 .016000 .039000	NO. REFL. FACT/STER .168067 .133690 .154698 .175707 .072574 .093583 .124141 .169977 .034377 .036287 .030558 .074484	DOSE REFL. FACT/STER .034981 .029824 .037284 .041374 .026632 .036973 .053371 .079709 .037414 .050711 .043386 .112048 SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER REFL. FACT. .664000	NO. FLUX REFL. FACT. .481187	DOSE REFL. FACT. •305629	ENERGY REFL. FACT. Q31017	ENERGY ABS. FACTOR .689816	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .336000
2402.205236	:	MEAN ENERGY SCAT . TR . NT .		MEAN ENERGY REFL. NT. Q23356		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 1.000000000 1.000000000 .00001010 2D

	ERED FLUX PER				
INCHES	1	2	3	4	5
	•09382560	-10181810	•05144249	•02842789	•03539441
1	•24412433	•19760506	•08958050	•06950389	• 08763940
2	.28182376	•29736886	•10891058	•06124693	•06717196
3 ,	• 28437442 [.]	•24880324	•13250999	•04905739	•06227237
5	•22213699	•16834242	•05334118	•06883790	05408071
8	•11448177	•10997968	•03250065	•01824730	• 00520479
12	•03280372	•02630333	•00341583	•00924489	• 00745029.
18	•00405866			•	•
24					
•	•		•		
INCHES	6	7	8	9	10
	•03373672	•06446939	•03273090	•19375912	•49558583
1	•09654576	•11000020	•06832236	•29124588	•51007093
2	•05013788	•10517011	•07840494	•24078692	• 45256089
3 ·	.04347129	·15442206·	•04937065	•19972750	.25947681
5	.04684121	.06354245	.04169354	•07999305	•11201150
8.	•00790092	•01496832	•01361801	.03140025	•01496858
12.		•00161003	•00318356	.00833178	•00108126
18				,	
24		•			
SCATT	ERER ELLIV TRAN	C 050 NT 14	ECY CROS W	. THICKNESS	
	ERED FLUX TRAN 1	SO PER MIS IN	EGY. GRPS. V		
INCHES	_		_	4	5
1	.01225544	•01953055	•03043958	.02196534	•01903016
2	.02102386	•05382567	•03175712	•03616871	•02437620
3	.02848692	•07391464	•05286190	•02194276	•04464204
5	.09088739	•06515996	•02273710	•03825836	•02977278
8	•05079088	•04717309	•02102902	•01365246	•00354956
12	.01656161	•01114761	•00151485	•00924489	
18	•00295753				
24					
		_	_	_	• -
INCHES	6	7	8	9	10.
1	•02664944	•03416369	•01768320	•10367821	•27829761
2	.01808265	•05847381	•04820626	•12417636	•29979813
3	.01327898	•09231736	•02950207	•10689344	•19107957
5	•02405215	•04186866	•03137564	•05824817	•08678047
8	•00645048	•01098952	•00910024	•02508572	• 01496858
12			•00318356	•00466524	•00108126
18	•				<u>-</u>
24					
					,
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.00000000	3.79999999	1.00000000	2.07229181
1	.73999999	•98569321	3.12072168	•42199999	2.18663831
2	.58299999	.89388877	2.45639343	.17799999	1.92158283
3	.46399999	.72991970	1.68200240	•07500001	1.55848572
5	30599999	•50214067	.87682994	•01300001	•92382095
8	.12600000	-20378955	•26302324	•00100001	• 36427028
12	.0290000	•04739902	•05084527	`	• 09342469
1.8	•00100000	.00295753	•00198966	•	• 00405866
24					

						*
	RUN NUMBER 888	HISTORIES 1000	ENERGY SET 20	ANGLE SET 2541	SLANT MFP 20.7168330	•
•	. INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	,
	1.0000000	1.0000000	•0000101	1.0000000	3.8000000	
SLAB CONFI	IGURATION NE	VADA TEST SI	TE SOIL (1007	SATURATED)		•
	. 05/	SION THICKNESS	SEE /CENTIMET	tac i		,
2.5400	2.5400	2.5400	5.0800	7 • 6200 °	10.1600	. '
15.2400	15.2400				1001000	
	NUM	ABER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	, NO DEE!		0000.000
GROUPS	FACTOR	TRANAFACTOR	FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1	*********		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•0620000	• 0938256	•0158022
.2			**	•0570000	.1018181	•0158086
3				•0230000	.0514425	•0096116
4				•0140000	.0284279	.0068077
5	•			•0230000	.0353944	•0111772
6				•0180000	•0337367	•0124293
7				•027 000 0	• 0644694	•0305382
8				•0180000	•0327309	•0189494
9				•0800000	•1937591	•1427699
10				• 2480000	•4955858	•4434189
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR '	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1.			•0000001	•0390000	•1489687	.0820700
2 .			•0000001	•0370000	•1413292	• 0901555
3			•0000001	•0570 000	.1814362	•1090714
4			•0000001	•0360 000	•1145913	•0815784
5			•0000001	•0480000	1527884	•1019333
6			•0000001	•0470000	•1496053	•1308001
7 ⁻ 8			•0000001	•0360000	.1145913	•0992400
9				•0590000	.1126814	•1058520
10			•	•0660000	•1260504	.1522939
11				•0430000 •0440000	•0821238 •0840336	1078773
12			•	•0580000	•0276929	•1494857 •1089174
					***************************************	01007114
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN'.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
	•0000002				•0000002	
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•5700000	1.1311904	•7073129	0,281525	•7184661	.0010000	•4290000
•		MÉAN ENERGY	^	MEAN ENERCY		
		SCAT.TR.NT.		REFL. NT.	,	
38.03402618		SCRIFFICATION	•			
223024020	•			· 0 /1 93903		

INC.ENERGY COS. THETA CUTOFF EGY. **ENERGY SET** RUN NUMBER 1.00000000 .86603000 .00001010 20 536 SLAB CONFIGURATION NEVADA TEST SITE SOIL (100% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 1 2 3 .03572204 ··· • 04796151 .10115051 .09524751 .05133250 .09751297 .23534687 .22027098 •08164852 .05663782 .20899291 .27175230 2 ·10483275 .04375187 .11110507 3 .23715269 .24977155 .12687522 .05008373 .05853023 .03997889 .03483620 5 .21108120 ·13092497 •07830092 8 .12020963 .06514126 .03151190 .02632130 .01319694 12 .02251809 .01083684 .00325068 .00392566 18 24 7 INCHES 9 10 .13511302 .54712449 .02808853 .06017852 .04805102 .08718342 .15950315 .08045887 .26478397 .67130195 .23584140 .05664233 .10623619 .05641866 .40421419 .06584297 .19474767 .28495602 3 .06135354 .09424141 5 .03969279 .03054730 .03274925 .07356646 .09793993 8 .01742051 .00982150 .03431957 .01758656 .01277831 •00561169 •00122506 .00219941 .00103444 12 18 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES 2 5 3 .01204141 .03493357 .01435189 .01637007 .03274003 .03345207 .01582891 2 .01166362 •06511222 .04868779 3 .03713095 .07344265 .04848494 .02168725 .02414538 .02552581 •03065534 .03121418 .05804932 5 .10107883 .02338935 .01116839 .01074037 8 .03669586 .01680028 .01669780 .01083684 .00325068 .00392566 12 18 24 9 7 INCHES 6 8 10 .03341858 .05623617 .03658050 .08850372 .38595030 1 .03682419 ·13950378 .29980730 2 .03022002 .03365885 .04589766 .11208229 .21228823 3 .03720196 •05180664 .06150975 5 .02076426 .02177091 .02164987 .07228325 .01619696 .00524488 .02731936 .01396705 8 .00122506 .00219941 .00103444 .00985038 .00357304 12 18 24 TOTAL NO. TOTAL FLUX TOTAL DOSE UNC.NO.FLUX TTL.FLX/NT. REGION BDS. TRANS-/NT-TRANS./NT. TRANS./NT. INCHES TRANS . / NT . 1.15469441 1.00000000 1.15469441 4.38783875 2.26293017 .71999999 1.13720848 3.56014324 +42608225 2.38073076 1 .53899999 .87179719 2.37027633 .15703844 1.75682610 .44099999 .05773472 •72190267 1.66598494 1.48128975 3 .77654606 .45142970 .73926169 .00692816 5 .27099999 .11000000 .16152250 .23635211 .33552917

.05624003

.06338017

.05259331

.03000000

12 18

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 23.921612	
	INC. ENERGY 1.000000	COS. THETA .866030	CUTOFF EGY	INC.FLX/NT 1.154694	INC.DSE/NT 4.387839	
SLAB CONFI	GURATION NE	ADA TEST SIT	E 801L (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800°	7.6200	10.1600	
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL.	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1 .				•054000 •057000	•087599 •082487	.014754 .012807
3				•032000	•044455	•008306
4				•019000	•030936	.007408
5				.027000	.041536	.013117
6				.014000	.024326	.008962
7.				.032000	.052116	.024687
8				•022000	•041614	.024092
9				•070000	.117012	.086219
10			•	•263000	•473826	.423950
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .				.086000	•164247	.085785
2				•089000	•169977	.109657
3				•067000	.127960	.081781
4 5				•091000	•1.73797 •087853	•1.09249 •086214
6				•046000 •050000	.095493	•086214
7				•047000	•089763	.093159
Ė				•050000	•095493	095055
9				.017000	.032468	.121751
10			•	.024000	.045836	.174530
11				.007000	.013369	.042326
1.2				.016000	.030558	.095722
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT.	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT. .590000	REFL. FACT. .995908	REFL. FACT. .624302	REFL. FACT. 029257	FACTOR •707419	FACTOR	FACTOR •410000
		MEAN ENERGY		MEAN ENERGY		
	-	SCAT.TR.NT.		REFL. NT.		•
3803.405236			•	0,49588		

	TERED FLUX PER				
INCHES	1	2	3	4	5
_'	•11550150	•09918951	•04592299	•03501453	•07056200
1	•22037538	•20083292	•09092860	•04390012	•08741502
2	•22632767	•28272430	•09233551	•05399488	•06670968
3	.28171322	•22450535	•09008980	•05449951	•07648288
5	•22135593	•12336889	•05283384	•03974753	•04703385
8	•10075638	•06279722	•02360261	•01494013	•01334215
12	.03852732	•01695369	•00749230		•00615061
18	•00752552				•
24					
INCHES	6	7	8 .	9	10
	•05228603	•07026903	•04410207	•15111951	•51868299
1	•05631084	•14986572	•07191997	•35537519	•59613893
2	•05864042	•10170457	•07501473	• 25300627	•39585860
3	.04516675	•07817783	.08132221		. 21913103
5	•03239561	•04580291	•02356954	•08567959	•07659969
8	•01622730	•00821756	•01582798	•04138113	•01812740
12	101022130	•00125782	•00138407	•00455176	.00147143
			•00130401	+UU+33176	*******
18		•00120292			
24					•
SCAT	TERED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	-5
1	•01752067	•02764377	•03613382	•01175096	•02185557
2	•03295847	•08503643	•04163131	•02059759	•02972507
3	•07515636	•06442607	•03725365	•02508181	•04129039
5	.08866495	•06174676	•03989973	.02422464	.03581156
8	.04464245	.03186812	.00861823	•00836629	•00699503
	•01594166	•01159558	•00749230		
18	•00460345		000147230		
24	***************************************				
INCHES	6	7	8	9	10
1	•02397300	•04838792	•02727248	-20518275	•38399966
2	.02673451	.03434886	.04394971	•14653728	•29606802
3	.02411870	.03101387	•05839771	•14590909	•16991655
5	.02121008	•02718911	•01549787	•06726722	•07015405
é	•00822730	•00259100	•01125137	•02770609	•01533091
12	***********	100237100	•00138407	•00455176	•00147143
-		00120202	•00130401	***************************************	•0014/143
18 24		•00120292			-
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.41420712	5.37398707	1.41420712	2.55498991
1	•69299999	1.22091172	3 - 80 4 30 6 5 4	•41719111	2.29025378
2	-52899999	.88062327	2.26939276	•12303603	1.72935266
3	42999999	•70791936	1.54936286	•03535519	1.40101829
5	26199999	•45449439	•73653641	.00282841	75121579
8	•10700000	•16559679	•23459278	-1454541	•31521988
12	•02500000	•04243680	•04302083		•07778900
-					
18	•0030000	•00580637	•00530553		•00872844
24					
24					• •

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 29.297892	•
	INC. ENERGY 1.000000	COS. THETA .707110	CUTOFF EGY •000010	INC.FLX/NT 1.414207	INC.DSE/NT 5.373987	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 301L (100%	SATURATED)	***	. :
	DE G	ION THICKNESS	ES (CENTIMETE	(RS)	•	•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	•
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY GROUPS 1 2 3 4 5	NO. TRAN. Factor	NO⊕ FLUX TRAN⊕FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .061000 .058000 .032000 .017000 .033000	NO.FLX.REFL FACTOR .081672 .070138 .032473 .024759 .049895	DOSE REFL + FACTOR •013755 •010890 •006067 •005929 •015756
6 7 8 9 10				.024000 .032000 .020000 .080000 .237000	.036972 .049688 .031185 .106858 .366766	.013621 .023536 .018054 .078738 .328159
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE	•	
ANGUL AR SECTORS 1 2 3 4 5 6 7 8 9 10 11 12 (S+U) NO.	NO. TRAN. FACTOR	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR .087000 .085000 .069000 .079000 .046000 .050000 .044000 .020000 .019000 .019000 SCAT.NO.FLX	NO. REFL. FACT/STER .166157 .162338 .131780 .150879 .087853 .116501 .095493 .084034 .038197 .036287 .028648 .036287	DOSE REFL. FACT/STER .068994 .076628 .062976 .071387 .081651 .108719 .074258 .059597 .121166 .078199 .088794 .090265 SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
NUMBER: REFL. FACT. •594000	NO. FLUX REFL. FACT. .850406	DOSE REFL. FACT. •514506	ENERGY REFL. FACT. Q28116	ENERGY ABS. FACTOR •718833	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .406000
3803.405236		MEAN ENERGY SCAT.TR.NT.		MEAN ENERGY REFL. NT. 047333	1	•

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SCATT INCHES	ERED FLUX PER I	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	5
INCHES	.06841252	•15781097	•07476499	•04928503	06995002
•					
1	12273205	•18454447	•09814450	•06922455	
2	.23514898	-21100738	- •08650444	.05281945	
3	•24775907	•20176957	•09984525	•04346870	•05297621
5	.12681554	•13687030	•03119134	•01653835	.03726579
8	•04494055	•05373125	•02306286	•00408065	•01014508
12	•03207554	•01707590	•00424,774	•00117941	•00169109
18	,	•00117578		*	
24			. ,		
INCHES	6	. 7	8	9	10
	•04260351	-08982752	•09414151	•25933952	•71201401
1	•05886296	•14459722	•07853592	-29335094	•59518591
ž	.07439943	•07741206	•07067486	•19430214	.26133445
3	.03272484	•07003613	•04348827	13285195	10361096
5	**:-:::::::::::::::::::::::::::::::::::		•02915238	•05229616	,
8	•03438730	•04665885			•03504069
	.00375211	•01070480	•00153234	•00564188	• 00945902
12	•		.00115208	.00112839	•00130651
18					
24					
SCATT	ERED FLUX TRANS	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	,
INCHES	1	2	3	4	5
1	•00504827	•02644950	.02472454	-01862848	.02818976
2	•04220030	•05092247	.03809571	.01514166	.03926467
3	.05859493	•07651081	•04732665	.02320095	.03544526
5	.05299631	•06437997	.01839489	.00861448	.02141038
é ·	.02296544	•02673520	•01324004	•00408065	•00871290
12	.01473819	•01057533	.00424774	************	•00169109
18	*********	•00117578	100454114		*00193103
24		**********			
24					
INCHES	6	7	8	9	10
1	•03170673	•05675168	•03598770	•16575899	-48680069
ž	•03951962	.04743996	•04069605	13981914	•23273239
3	.01735341	•03198984	•03312001	•09556765	.08810891
5	•02569100	•02639979	•01509176	•04384469	•03504069
8	•00122247	•01070480	•00153234	•00449104	•00759937
12	*******	*01010460	•00135254	.00112839	•00130651
_		J	*00113508	6,00112033	***********
18		į	•		
24	• •	•			
		•			•
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	2.92380562	11-11046136	2.92380562	4.49334226
1	.51299999	1.11395078	3.38725077	-23390448	1.95935405
2	.38299999	•70337480	1.63666770	•01754281	1.34888834
3.	.30599999	.50721844	•90238953	ı	1.02853095
5	.18800000	.31186397	•47782561		•54621672
8	•07000000	.10128424	-11596612		-16705053
12	•01900000	.03483933	.03079438		.05985666
18	.00100000	.00117578	•00070547	•	.00117578
24					.,
- • ,	•	•			•

•	RUN NUMBER	Uterobies				
		HISTORIES 1000	ENERGY SET 20	ANGLE SET 0∳	SLANT MFP 60.571993	o,
	INC. ENERGY 1.000000	COS. THETA. .342020	CUTOFF EGY .000010	INC.FLX/NT 2.923806	INC.DSE/NT 11.110461	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E SOIL (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	MUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR .037000	NO.FLX.REFL FACTOR .023398	DOSE REFL. FACTOR .003941
2 3				•076000 •030000	.053974 .025571	.008380 .004778
4 5 6				.023000 .038000 .025000	.016856 .023924 .014571	.004037 .007555 .005368
7 8 9				.038000 .036000 .099000	.030723 .032198 .088699	.014553 .018641 .065357
10		·	*	•291000	.243523	.217889
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR SECTORS	NO. TRAN.	NO. TRAN. FACT/STER	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
1 2	PACTOR	FACITSIER	FACI/SIER	•093000 •066000	FACT/STER .177616 .126050	FACT/STER •035682 •033167
3 4 5	•			.083000 .071000	.158518 .135600	.037707 .030711
6 7		•		.064000 .065000 .053000	•122231 •124141 •101222	.055706 .054192 .039594
8 9				•070000 •030000	.133690 .057296	.052488 .088306
10 11 12			•	.028000 .030.000 .040000	.053476 .057296 .076394	.076075 .064585 .101189
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT.	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT.	NO. FLUX REFL. FACT,	DOSE REFL. FACT.	ENERGY REFL. FACT. 035408	ENERGY ABS. FACTOR	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR
3803.405236	• JJ3439	MEAN ENERGY SCAT TR-NT	U-29408	.645911 MEAN ENERGY REFL. NT. Q51093	•001000	.306000

									E		
		ED FLUX	PER	MEDIKON	AI F	KEGTON		1 N			•
	INCHES	.1		2000			3	4.00	4		5
	•	.0827		•093			04091			39359	. 03048399
1		. 16544		•166			10192			08719	• 05403703
2		.1966		•221			13742			43191	• 06420904
3		.1974		•2100			12787		_	96189	• 08547715
5		•1939		•1950			11383	-7		64978	•07090570
8		•13909		•1238			07231			79662	• 04422960
12		•0921		•075			04016			95511	• 03040503
18		•03339		•0409			00871		• 007	09510	• 00136693 [,]
24		•00330	0011	. •001	13154	•	00150	667	4,		•00106302
				_			_		_		
	INCHES.	6		7			8		9		10
		•0171		•0536			02882			93832	•30013030
1		•04050		•074			08137			36988	•44759637
2		•0521		•1289			11467			62532	~ •43069148
3		.0614		•1383			08976			26549	•37957875
5		•0399	1285	•0959	94586	3 •	11171	692	•137	82126	.28848202
8		•01462	2516	•0919	97310	•	06951	175	•091	09080	•13524253
12		•02192	2115	•0397	72662	2 •	02674	768	• 040	74713	.05006445
18		•00136	5864	•0050	06883	3 .1	00302	445	•006	48090	.00392223
24	•										
		,									
						•					
		ED FLUX	TRAN		NT. I	N EGY	GRP	S. 1	LS. THIC	KNESS	
	INCHES	1		2			3		4		5
1		•00132	2511	•010	13636	5	01742	827	•014	24006	•01170633
2		•0057	5984	•0234	+0976	اه د	03310	106	•043	83440	•02270508
3		.02528	3699	•0540	9635	5 • (03816	360	•042	93405	•03211645
5		•05937	7782	•0513	34527		03198	697		40652	•01922102
8		.04735	3323	•0551	8735		02529			83054	•02726183
12		.02121		•0324			01806			13180	•01258344
18		.01414		•0067			00442			39272	•00136693
24		•00330		•0011			00150	_		J , L , L	•00106302
6 , 4		••••				•	20170				•00100302
	INCHES	6		7			8		9		10
1		.01437	7990	•0121	0643	3 .	02523	603		09229	•20119522
2		•02021	-	•0348			03621			94232	.24983423
3		.0100		•0552			02685	-		54694	• 26306636
5		.02640		•0617			06170			74534	
.8		.00484		•0448			3838			66510	•18978350
12		•00498		•0218			33636 31467				•08707066
										38699	•04051456
18		.00136	0004	•0050	,000	• • •	00302	442	• 003	72327	•00212906
24									•		-
		TOTAL: NO	١.	TOTAL F	FI 11X	TOTA	AL DO	SE	UNC.NO	FLUY	TTL.FLX/NT.
		TRANS./		TRANS.			NS./N		TRANS.		REGION BDS.
	411-011-0	1.00000		1.0000			29230		_		
1		89099		1.0668			29230 29974		1.000		1.73366495
2										00000	2-10416038
		•79299		1.0598			96133			00000	2.19393424
3		•70299		•9743			37101			00001	1.95584598
5		•53399		•7867		_	45802			00000	1.51021263
8		.31799		•4557			23453			00001	•89572036
12		•14600		•2218			52134	-		00000	•47869296
18		•03100		•0464			7703		•001	00001	•11234084
24		•00500	0000	•0070	0134	• •(00566	973			•00700134

• • • •	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 8.513930	
	INC. ENERGY 2.000000	COS. THETA 1.000000	CUTOFF EGY	INC.FLX/NT 1.000000	INC.DSE/NT 4.100000	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (100%	SATURATED)		
		ION THICKNESS	ES (CENTIMETE	RS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	, ,
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1 .	.002000	•003191	•000498	•049000	.082755	•012918
2 .	•001000	•001120	.000161	•050000	.093136	.013402
3	.001000	.001598	•000316	.023000	.040915	.008083
4		*		.023000	.043394	.013759
5	.001000	.001065	•000467	•015000	.030484	.013383
6	*******	******		.009000	.017117	.009185
7				•034000	.053667	036650
8				.019000	.028822	.023901
9				•048000	.097938	.093161
10				•150000	.300130	•300130
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		т.
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	THETON	THE TY STEN	/ MC1/3/2M	•032000	.122231	•073476
ž	.001000	.003820	.001785	.041000	.156608	.105440
3	•001000	.003183	.000513	•045000	.143239	103490
4	•001000	*000100	000212	•043000	136873	100993
5				•028000	.089127	•082059
. 6	.001000	•003183	•000669	•035000	.111408	.094136
7	•001000	•003103	•000009	•031000	*	•
8	001000	001010	000603		•098676	.083207
9	.001000 .001000	.001910 .001910	•000603 •000550	.053000 .028000	.101222 .053476	.111286
-	•001000	*001910	•500550			•056307
10			•	•020000	.038197	• 060599
11				•023000	.043927	.079399
12			٠	•041000	.019576	.081619
(S+U) NO.	(S+U) DOSE	UNSCAT	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.005000	•001442		•005000	•.006973	.001442	000016
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•420000	.788358	524573	0.18350	•816341 ₁	•002000	•573000
4	•	MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
4104.102618		0.06286	•	0.87379		

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 2.00000000 .86603000 .00001010 2C

SCATT	ERED FLUX PER I	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	* J. v.
INCHES	1	2	3	4	5
	.08861649	•07441253	•06094950	•05404650	• 03569005
1	•18719113	•15453012	•10646982	•09916195	•06162995
2	•29364854	•17205004	•09146256	•10935185	•06889940
3	•24376155	•21234792	•13103488	•11260138	•07481518
5	•27401460	•20060801	•10253033	•10289526	• 05985954
8	•16575944	•15167866	•08324262	•05941795	• 04476259
12	•09151482	•10145014	•03133783	•03293354	•01958098
18	•01494638	•01657281	•01220512	•00651939	•
24	•00242797		•00269134	•00104288	•00159181
INCHES.	. 6	7 .	8	9	10
INCHES .	•02222852	•04327001	.06782853	•11568200	. 29241699
1	.04428367	•09804279	.08983116	•22761438	•50995378
. 2	•06450629	•11239586	•10049034	•28284844	•50746129
3	.06953219	•12859713	•11452186	.18977668	.42896013
5 5	•03271336	•09978621	•09085139	•21336442	• 30345614
8	•02678566	•10446594	•04214466	•08023809	•13216734
12	•00766038	•03455814	J01660675	•01869858	•03212116
18	•00587984	•00329768	•00485332	•00109358	• 00740683
24					•00156269
SCATT	ERED FLUX TRANS	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2	3	4	5
1	.00296422	•00363687	.00488224	.01332595	• 0044.8909
2	.00797996	•01928646	.01308774	.03130845	.01188838
3	.03288724	•05305605	.02719911	.03914503	.02618605
5	.05725318	•06561658	.02754112	•03603688	•02323236
8 .	.04107695	•06162865	.02339679	•02539438	.01241177
12	.03531334	•03951670	.01724212	•02147661	•00750848
18	.00527224	•01208115	•00349580	•00227724	100134040
24	•00242797	.01200113	•00269134	•00104288	•00159181
24	**********		**********	400104E00	
INCHES	6	7	8	9	10
1	.01207217	•01885712	•02196063	•06865009	•26043392
2	.02443310	•03873999	.02186344	.12073806	.30475275
3	.02879317	•03769096	•04665317	•09149569	•30313212
5 .	.01133664	.05399387	.04879779	.11389138	.22170178
8	.01149618	•04567946	•03568193	.04422540	.09445609
12	.00266071	•01981060	.01164328	.01525750	.02911031
18	.00449199	•00228813	.00345286	•00109358	•00740683
24	000147277	.00220013	1003 13200	100101330	.00156269
• •					
			FOTAL 5545		
****	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BOS.
	1.00000000	1.15469441	4.95630370	1.15469441	1.95815750
1	.88899999	1.17798939	4.84742029	•76671709	2.34542585
2	•77099999	1.10329857	4.27286519	•50922023	2.31233485
3	.68399999	1.02340937	3.58322406	•33717077	2.04311968
5	•50799999	.80835716	2.53758170	• 14895558	1.62903486
. 8	.29699999	•43817129	1.16703744	•04272370	93338664
12	•13300000	•20762251	•42022101	•00808286	+39454518
18	.02500000	.04185984	•07870671		•07277496
24	•00600000	•00931670	•01413366		.00931670
					1

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 9.830988	
	INC. ENERGY 2.000000	COS. THETA	CUTOFF EGY •000010	INC.FLX/NT 1,154694	INC . DSE/NT 4.734247	
SLAB CONFI	GURATION NEV	ADA TEST SITI	E 80IL (100%	SATURATED)	ŧ	
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	*
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN.	NO. REFL.	NO.FLX.REFL FACTOR	DOSE REFL.
. 1 ·	•002000	.002137	•000334	.048000 .046000	•076744 •064443	.011980 .009274
3	.001000 .001000	001700	.000336 .000280	•036000 •024000	•052784 •046806	.010428 .014841
5 6 7	•001000	•001700	•000746	.014000 .009000 .028000	.030909 .019251 .037473	.013570 .010330 .025591
8 9 10	•001000	•001700	•001700	.028000 .056000 .140000	.058742 .100184 .253242	.048712 .095297 .253242
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
· ANGULAR	NO. TRAN.	NO. TRÂN.	DOSE TRAN	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR .001000	FACT/STER •001910	FACT/STER •000536	FACTOR .067000	FACT/STER •127960	FACT/STER .065921
. 2 ·	•001000	•001910	•000319	.061000 .054000	•116501 •1031 32	.076618 .067747
4 5	.001000	.001910	.000319	.057000 .029000	.108862 .055386	.074871 .070754
6 7 8	.001000 .001000 .001000	.001910 .001910 .001910	.001425 .003246 .000641	.043000 .031000 .036000	.082124 .059205 .068755	.094339 .070928 .064389
9 10		***************************************	•	.012000 .016000	.022918 .030558	.095328 .105875
11 12				.009000 .014000	.017189 .026738	.057483 .097810
(S+U) NO. TRAN.FACT. .006000	(S+U) DOSE TRAN. FACT. .003396	· UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT. .006000	SCAT.NO.FLX TRAN. FACT. .008121	SCAT. DOSE TRAN. FACT. .003396	SCAT. EGY. TRAN. FACT. .000107
NUMBER REFL. FACT. .429000	NO. FLUX REFL. FACT. .740578	DOSE REFL. FACT. .493264	ENERGY REFL. FACT. Q18269	ENERGY ABS. FACTOR .816232	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .564000
4104.105236	·	MEAN ENERGY SCAT.TR.NT. -0.35810		MEAN ENERGY REFL. NT. 085169	·	

RUN NUMBER CUTOFF EGY. ENERGY INC.ENERGY COS. THETA •70711000 591 2.00000000 .00001010 20 SLAB CONFIGURATION NEVADA TEST SITE SOIL (100% SATURATED) SCATTERED FLUX PER NEUTRON AT REGION BDS. IN ENERGY GRPS. INCHES 3 .04880701 .08178449 ·10193800 .05549751 .05545500 .16539579 -13988570 1 .14503087 .10501560 .08268262 2 .23841610 .25121160 -11909789 -10406727 .07659745 3 .24197009 .19876913 .13477445 .10753305 .04859288 5 .29881736 .17431545 •12361939 .09973205 .05653253 8 .14478054 •13330054 •07217801 .04970854 .04471496 .02179170 .01915359 .02431742 .06518169 +05750427 12 18 .00777106 .00132356 .00318692 .00256561 .00154022 24 INCHES 10 .03227206 •07017301 .06607854 .08430401 .31352301 .05533967 .10924080 .21081514 .13513244 .55944374 1 .14039063 .11314885 2 .06246826 .24306077 .52232383 3 .09646680 .11469569 .10308146 .26376394 .43583909 .01835108 -14093321 .07634556 .07741271 .21598546 .08997017 8 .02636802 .09219699 .03635935 .08285830 12 .00629228 .03001368 .00813171 .02433731 .02476914 .00153355 .00283490 .00109664 18 .00109664 24 SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. VS. THICKNESS INCHES .01757955 .02770265 .00748343 .02044288 1 2 .02038627 .02707373 .05299796 .03354171 .01929934 3 .03752233 .04441163 .04594847 .02698315 .01917675 .04389105 5 .06967131 •06335532 .04464154 .02525624 8 .05369546 .04209181 .02745514 .02208969 .02154362 .02449999 .02225664 .01707287 .00940350 .00383529 12 .00256561 18 .00565104 •00132356 .00214374 .00154022 24 INCHES 9 10 .01425399 .03388100 .03869424 06260400 ·28718698 2 -02372411 .03750254 .04307440 .10598124 ·33127500 3 .03965857 .03591698 .04189750 .11955288 ·31003252 5 .00708241 .05322522 .04631644 .09028719 .17365351 .05491723 .07239723 8 -01088116 .04317456 .02027691 12 .00456856 .01502613 .00106218 ·01188440 -02476914 .00148555 18 .00109664 .00109664 24 TOTAL DOSE UNC.NO.FLUX TOTAL FLUX TTL.FLX/NT. TOTAL NO. INCHES TRANS./NT. TRANS./NT. TRANS./NT. TRANS./NT. REGION BDS. 1.00000000 1.41420712 6.07021212 1.41420712 2.28594271 .85499999 1.36683823 5.48360051 .85700951 2.56499191

4.49956211

3.60912828

2.11710789

•99290169

.28299810

.01965447

.00558932

.51901401

.31395398

·11455077

.02545572

-00282841

2.38979665

2.05944056

1.39659556

.79789117

.28432121

.02031224

+00263686

1.21387032

1.03505478

.73193101

.39397855

.13720713

.01426613

.00263686

2

3

5

8

12

18

.72399999

.61799999

.45299999

.25399999

.09600000

.01200000

-00200000

				•		•
	RUN NUMBER 591	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 12.040461	•
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	
	2.000000	•707110	•000010	1.414207	5.798249	• •
SLAB CONFI	GURATION NEV	ADA TEST SIT	E SOIL (100%	. SATURATED)	•	
	. REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	**
15.2400	15.2400					
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFIL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	. FACTOR	FACTOR
1 .	•001000	.001388	•000217	•047000	•057831	•009027
2 .				•049000	.072081	.010373
3				.032000	.039243	.007753
4		•		.028000	.039213	.012433
5				.020000	.034512	.015152
6				.018000	.022820	.012245
7		•		•037000	•049620 044735	.033887
8				.027000 .047000	.046725 .059612	.038747 .056704
9 10		.000873	.000873	.170000	•221695	.221695
10	-	BER OF SCATTE			•======	•44.201
			•	,		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1				.068000	.129870	.056796
2		001010	•001666	.065000	•124141	.071793 .066920
3	.001000	.001910	•001000	.059000	•112681 •120321	•070452
4. 5				.063000 .031000	•059205	.053019
6				•050000	.095493	.096045
7				.042000	.080214	.070175
8	.00100C	.001910	.000414	.052000	.099312	.086407
9	•001000	•001710	•000.11	•012000	.022918	.062619
10		•		.012000	.022918	.079491
ii				.009000	.017189	.044597
12			•	.012000	.022918	.040038
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.002000	.001089		•002000	•002260	.001089	•000090
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•475000	•643352	•418016	020911	•789983	•001000	•522000
		MEAN ENERGY		MEAN ENERGY		•
_		SCAT .TR.NT.		REFL. NT.		
4104.105236		0.89749	*	0.88047		

	SCAD CONFIG	OKA: ION	NE	YADA I	E91	311	2 301	_	(100	70 SAII	יהחנ	EU /		
	SCATTER	ED FLUX	PER	NEUTRON	LAT	RE	SION E	BDS	. IN	ENERG	Y GR	PS.		
	INCHES	1.		2			- •	3			4	,		5
	***************************************	.0434	1400	•098	32424	49	05	31	9052	•0	8942	397	0	4708252
1	,	.11803		•129	564	58	•06	69	7151		4151		• 0	8012849
- 2		.14301	1876	•140	0824	44	•14	05	3932	•1	0759	218	•0	9511434
3		.16542	2492	-194	850	71	.14	28	7121	•1	1560	832	• 0	6995935
•	3	•22997	7447	•196	322	38	•09	38	1411	•0	5161	851	• 0	3225198
8		.11113	3162	•081	510	77	• 04	19	3294	•0	4183	272	·• O	1878515
12	?	.02473	3986	•024	240	•3	•00	81	9120	•0	1087	564	• 0	1180114
18	3	.01326	620	•006	085)3				•0	0110	492		
24	•								•					
	INCHES -	6		7				8			9			10
		•04399			37679			-	5202		2117		• 6	0739399
1		•04884			785		_		5606		5678			9821358
	2	•04862			741				4368		9125		• 4	4162685
	3	•0317			3509		-		4016		5742			0639994
5		• 04442			7602				3976		7679		•1	4689693
		•01092	2352	•059	7739	53	•02	261	1082	•0	5835	935	• 0	3993569
12	2	•00177	7375	•014	158	54	•00	76	6884	•0	1421	873	• 0	1006702
18				•001	428	95	•00	23	0279	•0	0514	458	• 0	0119174
24	•													
						-								
		ED FLUX	TRAN			IN	EGY.		P5.	VS. TH	ICKN	E55		_
	INCHES	1		_	} . -			3		_	4		_	5
]					670				7332		23:10		_	3066962
3		•00346			469				3801		3843		_	3096186
3		•01769		-	490				1343		5731	_		2938299
:		•07051			798				9251		2538			1772952
		•0421			754	-		-	7551	-	1865			1432761
12		.01828		•010	6041	38	· • 00)56	9451		0118		• 0	0812790
14		•0022	7302							• 0	0110	492		
24	•		•											
	INCHES				7.			8			9			10
1		6. •01877	7776		336	76	^=		7288	_	9612	616		10 1093101
						-			6985	_		-		2063048
3		•0315			9094 137				6962 4494	_	9632 0363		_	5214649
•		•02203							1770					
8		-01876)719! 3380:						4574 33 8 3			3143769
		•00936 •0017			390				7961 0444		9927			3480314
12		.0017	1312	•010	7370	, 4								0901088
18							•00	143	0279	•0	0411	7	• 0	0119174
2.4	•													
			•											
		TOTAL NO	٦.	TOTAL	FLU	•	TOTAL	. De	0SF	UNC.	NO - F	LUY	TTI al	FLX/NT.
		TRANS.		TRANS			TRANS			TRAN				ON BDS.
		1.00000		2.923			12.54				2380			4579321
1	1	67099		1.704					6206		3502			0493209
- 2		•51099		1.053					4615		6547			0971889
3		.43199			1045				7397		2864			3985793
į	Š	30799			732		_	_	5656		1461			8941781
		-15000			766				5036	• •	• •			9026221
1		•05400			346			-	7809					2773516
10		•00700			988				8549					3052421
24						- ,				•			- •	

,	RUN NUMBER 592	HISTORIES 1000	ENERGY SET	ANGLE SET 0 ∳	SLANT MFP 24.893077	
	INC. ENERGY 2.000000	COS. THETA .342020	CUTOFF EGY .000010	INC.FLX/NT 2.923806	INC.DSE/NT 11.987603	,
SLAB CONFI	GURATION NEV	ADA TEST SITE	E 801L (100%	SATURATED		
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	ŅUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. Factor	NO. FLUX	DOSE TRAN.	NO. REFL. FACTOR	NO.FLX.REFL . FACTOR	DOSE REFL. FACTOR
1 2				.031000 .046000	.014848 .033601	.002318 .004835
3				.032000 .044000	.018192. .030585	.003594 .009698
5 6 7				.024000 .021000	.016103 .015047	.007070 .008074
8. 9			,	.051000 .038000 .084000	.038911 .034288 .075645	.026573 .028434 .071955
10		•		255000	.207741	.207741
	NŲM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		•
ANGULAR SECTORS	NO. TRAN.	NO. TRAN. FACT/STER	DOSE TRAN. FACT/STER	NO. REFL. FACTOR	NO. REFL. FACT/STER	DOSE REFL. FACT/STER
1 .	•	• • •		•089000 •064000	.169977 .122231	•037268 •037295
3	•	•		•068000 •079000	.129870 .150879	.039572 .042471
5 6 7		•		.037000 .055000 .052000	.070665 .105042	.035534 .049835
8 9		•		•074000 •017000	.099312 .141329 .032468	.049864 .072669 .052396
10 11				.022000 .031000	.042017 .059205	.069340 .099392
12				.038000	.072574	.121566
(S+U) NO. TRAN.FACT.	(S+U) DOSE TRAN. FACT.	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT.	SCAT.NO.FLX TRAN. FACT.	SCAT. DOSE TRAN. FACT.	SCAT. EGY. TRAN. FACT.
NUMBER REFL. FACT. .626000	NO. FLUX REFL. FACT. .484961	DOSE REFL. FACT. .370291	ENERGY REFL. FACT. Q32446	ENERGY ABS. FACTOR .675533	NUMBER ABS. FACTOR .001000	NO. CUTOFF FACTOR .373000
4104.105236		MEAN ENERGY SCAT.TR.NT.	,	MEAN ENERGY REFL. NT. 103660		

٠,			,		
SCA1	TERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1	2	3	4	5
	•07186525	.05380714	-08000858	•02785899	.03735231
1 .	•13372780	•14303495	•07632349	•07087441	•09939127
-2	•18649043	•13010217	•07562736	•06626868	•10920080
3	•16441491	•15511197	•09427747	•10551370	•10336432
5	•22624927	•15455932	14493077	•09027848	•11095967
8	•19097640	•13214211	10155520	•06533366	•09355313
12	.17946480	-11199814	•05454183	•03208777	.05037355
18	.04290726	.02420014	•01063370	.02518433	.01438470
24	•00915992	•00253607	•00126565	***************************************	•00257566
67	••••	10023300.	•00160707		*00231300
		-	•	•	• •
INCHES	6	7	8	9	10
	•07348219	•04618531	•04539121	•13612680	.16543851
1	•13993411	•10089891	•06746238	•15451731	• 24306083
2 .	.14448585	•10791973	•10138789	•18826441	.27729432
3 .	.14388973	•11607934	•11185951	.17371709	.27328548
5	.16826608	.11908869	-08410985	-18016804	•23771241
8	•12604037		•05609809	•11803836	•14148854
12	.07671388	•04508422	•04680059	•07114459	•06272386
18	.02169613	•02029938	•00443467	•01881195	•03438930
24	•00733083	•00595278	•00414592	•00449858	• 00995699
SCA1	TERED FLUX TRAN	IS. PER NT. IN	EGY GRPS V	S. THICKNESS	
INCHES	1	2	3	4	5
1	•	•00651097	•00849146	•00688081	
	00707/10				•01847159
2	•00797613	•00890315	•00841126	•01007021	•02977338
3	•00918545	•00965551	•01098510	•02635311	•04474216
5	•05130274	•03110770	•04635151	•031625.12	•02442180
8	•04025643	•04141830	•02810609	•03113048	.03562043
12	•04030778	•02761542	•02957031	.01792411	.02329157
18	.01441488	•00988192	•00514124	.00231036	.00781945
24	•00915992	•00253607	•00126565	***************************************	•00257566
24	•00717772	100273001	***************************************		*00251566
INCHEC		-	•	9	• •
INCHES	6	7	8		10
1	•05374010	•04244670	•02808592	•02358669	09234701
2	•04688805	•04401634	•03062572	•07311776	•17714882
3.	•04729874	•03874919	•04834015	•09033161	•19292246
5	•06212805	•05876620	•03578730	.08485224	.18823056
8	.06188698	•05055183	•03030391	.08898567	.11679679
12	.03172546	•02360728	•02095626	•05710102	•05259589
18	• 00858397	•01342572	•00339669	•01533461	•03198654
24	•00733083	•00595278	•00414592	•00449858	• 00995699
					r
				ı,	
•	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.00000000	4.78461538	1.00000000	1.70310265
1	•93100000	1.05356126	4.74415222	•77299999	2.00222546
	.83299999	1.03393082	4.54751406	•59700000	
2					1.98404165
3	•76499999	•98056348	4.16010965	•46200001	1.90351353
5	•64899999	.88957323	3.32551849	•27500000	1.79132258
8	•44899999	•65205691	2.24112486	•12700000	1.22333081
12	.25399999	•36969510	1.13356381	•04500000	•77593323
18	.085000.00	.12129537	•39085006	•00900000	.22594155
24	•03100000	•04942240	•15202138	•0020000	.04942240
- -					***************************************

	RUN NUMBER 593	HISTORIES 1000 .	ENERGY SET	ANGLE SET 2841	SLANT MFP 6.185482	
	INC. ENERGY 3.000000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 4.600000	
SLAB CONFI	GURATION NET	VADA TEST SIT	E SOIL (100%	. SATURATED)	•	
	REG	ION THICKNESS	ES (CENTIMETE	RS)		•
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	•
15.2400	15.2400			•		
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.006000	.009208	.001281	.030000	.071865	•009999
2	.002000	•002509	•000322	•035000	.053807	.006901
3	.001000	.001262	•000222	.030000	.080009	.014088
4				•020000	•027859	.007873
5	.002000	.002662	•001157	•023000	.037352	.016240
6	.004000	•007225	•004869	.038000	.073482	•049521
7	•003000	•005627	•004771	.023000	•046185	•039157
8	.001000	•005915	•005272	•019000	•045391	•040457
9	•003000	•004537	•004143	.085000	•136127	•124290·
10	•007000	•010141	•009700	•064000	.165438	•158245
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•002000	.007639	•007217	.043000	.164247	.093157
2	•004000	.015279	.006746	.019000	.072574	.039669
3	.002000	.006366	.005424	.030000	.095493	.063470
4	.002000	.006366	•001051	.033000	.105042	.074429
5	.003000	•009549	.005109	.030000	.095493	.077594
6	•003000	.009549	•012121	.026000	.082760	.077154
7	.002000	•006366	•004989	.021000	.066845	.062575
8	.002000	.003820	.003383	.038000	.072574	.088517
9	.003000	•005730	•005848	.034000	•064935	.082341
10	.001000	•001910	•003800	•027000	.051566	.063865
11	.004000	.007539	.013315	.023000	.043927	.065062
12	.001000	.000477	.002517	.043000	.020531	.078034
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN'. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•031000	.033737	•002000	•029000	.049086	.031737	.001211
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•367000	.737516	•466772	015670	.829178	•001000	.601000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		· REFL. NT.		
4604.402618		1,25301		1.28096		

RUN NUMBER 1NC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 3.000000000 .86603000 .00001010 28

	ERED FLUX PER	NEUTRON AT RE			_
INCHES	1 •05927703	•04763053	3 •04395601	4	. 02516403
1	•10412755	•10027613	•06947954	•05338801 •05392999	• 08380045
2	.17997210	•17061481	•11398645	•07253704	•09371956
3	.18332134	•21166007	•12898717	•11566284	•08279996
5	.25497786	•17581665	•10755333	10808091	•11359376
8	.21328408	•17053442	•08438716	•07572742	.10094382
12	.09879784	•11266002	•04398908	.03723830	.04594448
18	.02502157	•02753017	•02096238	•01001101	.00380558
24		•00468226	•	.00110984	.00128012
INCHES	6	7	8	9	10
	•10112199	•05813252	•05769554	•15294299	•21696800
1	•16752383	•08477965	•08753645	•19656954	•30032182
2	•16490642	•10875470	•13783584	•17994399	• 36503408
3	• 19263897	.13454289	•14393679	•17240613	•32591505
5	•17253407	11989829	•09510536	•13617176	•25775104
8	.09741895	•07586459	•07109411	•13733476	•13736282
12	.08515759	•03719378	•02515767	•06935456	•04453113
18	•02207292	•02035826	•01775970	•01147841	•00873738
24		•00186512		•00244221	•00341324
	ERED FLUX TRAN		EGY. GRPS. V		_
INCHES	1	2	3	4	5
1	00575/10	•00105122	•00429290	0110105	•01953028
2 3	.00575610 .01284577	•01082128 •02793233	•00781457 •01907320	•01191355 •01721348	•01463537 •02721717
5	•04778383	•03458028	•03237666	•03743356	•04908850
8 .	•05433446	•04398388	•02894777	•02355893	•03815501
12	•03237209	•04785525	•01638891	•01088524	•01849845
18	•00990929	•00458348	•00701966	******	********
24	000770747	•00468226		•00110984	•00128012
INCHES	6	7	8	. 9	10
1	•03335187	•02241966	.02814429	•03234045	•15402598
2	.06205752	•04410316	•04078771	.04924439	.23667235
3	.06474121	.07645734	.05342250	.07626349	.24278336
5	.05953642	.05344728	.05058620	•07087871	.20260544
8	.0381.0967	•04363094	•04777716	.08841291	•11204532
12	.05650738	•02982931	•00993697	•04221027	•03895262
18	.01473251	•00413454	•01127460	•01044221	•00768566
24		•00186512		•00244221	•00341324
- -	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
•	1.00000000	1.15469441	5.52476864	1.15469441	1.91397040
1	•89500000 7000000	1.15309460	5.31850422	•85793 79 5	2.10628289
2	.79999999	1.12119732	4.97291940 4.57290792	•63739132 •47227002	2•22469629 2•16414124
3 5	•73699999	•89927783	3.33507214	•26096093	1.80244398
8	•60699 999 •40099 999	•62518795	2.10346217	•10623188	1.27018401
12	•18900000	•33576791	•96945596	•03233144	•63235591
18	•04500000	•07440073	•23026146	•00461877	•17235615
24	•01100000	•01479279	.04142415		.01479279

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET ∂ ∳	SLANT MFP 7.142343	
	INC. ENERGY 3.000000	COS. THETA	•000010	INC.FLX/NT 1.154694	INC.DSE/NT 5.311594	•
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 301L (100%	SATURATED)		
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX	DOSE TRAN. FACTOR	NO. REFL. FAÇTOR	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1 2 3	•003000	•003653	•000469	.034000 .029000 .024000	.051336 .041249 .038067	.007142 .005291 .006703
4 5 6	.001000 .001000	.001069 .001069	.000302 .000465	.026000 .015000 .047000	.046236 .021793 .087575	.013067 .009475 .059018
7 8	.001000	•001700	•001441	.028000 .024000	•050344 •049966	•042683 •044535
9 10	.002000	.001953 .002838	•001783 •002715	.081000 .087000	•132453 •187901	•120936 •179731
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS 1 2	FACTOR •004000 •002000	FACT/STER •007639 •003820	FACT/STER •004991 •001464	FACTOR •072000 •056 0 00	FACT/STER •137510 •106952	FACT/STER •074223 •075624
3 4 5	•003000	•005730	•004078	.041000 .052000 .029000	•078304 •099312 •055386	.056425 .059988 .068024
6 7	.001000	•001910	•000416	.033000 .030000	.063025 .057296	.073669 .066133
8 9 10	•001000	•001910	•002752	.027000 .009000 .014000	.051566 .017189 .026738	.056148 .075289 .096919
11 12		¢		.014000 .018000	.026738 .034377	•102194 •128481
(S+U) NO. TRAN.FACT. .011000	(S+U) DOSE TRAN. FACT. .007174	UNSCAT. NO. FACTOR	SCAT. NO. TRAN. FACT. .011000	SCAT.NO.FLX TRAN. FACT. .012281	SCAT. DOSE TRAN. FACT. .007174	SCAT. EGY. TRAN. FACT. 0,00490
NUMBER REFL. FACT. •395000	NO. FLUX REFL. FACT. .706920	DOSE REFL. FACT. .488581	ENERGY REFL. FACT. Q18022	ENERGY ABS. FACTOR .814880	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .594000
4604.405236		MEAN ENERGY SCAT.TR.NT. 133557	•	MEAN ENERGY REFL. NT. 136873	,	

SCAT	TERED FLUX PER I	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHES	1.	2	3	4	5
•	•07832250	•05475200	•03883952	•04305750	• 06405053
1 .	•15044344	•11082673	•06105892	•05928878	•09631125
2	•17615029	•16900055	•09420246	•11680692	•08838673
3	•19156964	•18604344	•11722152	10985152	• 09496442
5	•22525171	•19230569	•11090556	•07288264	10882184
8	•16425330	•15618793	•04645805	•05901274	•11641380
12	•10028743	•11690276	•05083888	•02967298	•03705749
18	•04101373	•00929533	•00702450	•00382905	•00495265
24	•00103885	•00246644	•00139228		• 00244663
INCHES	6	7	8	9	10
	•11336300	•06301552	•05822652	•15088304	·20015150
1	•15758426	•08955038	•06922303	.18615490	•33670117
. 2	•15954197	•16406904	•12893236	•21146727	•39358528
3	•21189966	•16349830	•10660099	•19387050	•31323263
5	•19279427	•12515141	•08371903	•18822647	•28488000
8	•08636365	•06639454	•05941847	•09235960	•11310816
12	•06964129	•03712070	•03517642	.03231265	•04118797
18	•02359347	•00701967	•00797474	•01044419	.01544294
24	•00402919	•00125133			•00222411
	FF0F0 51 T0.4		#64 6556 W		
INCHES	TERED FLUX TRANS 1	2 PER NI . IN	EGT. GRPS. V.	S. THICKNESS	5
1 TACHES		•01246205	•00355000	•00475036	•02142907
2	•00995755	•02077104	•00879926	•01248340	•02087089
3	•02389581	•02495192	•02683695	•02427663	• 02015902
5	•03852283	•04319233	•03748710	•02300213	•03848635
8	•05125714	•04293804	•01943160	•01339380	• 03042557
12	•03752937	•03188864	•02091189	•01459209	•01580770
18	.01065143	•00696965	•00447131	•00161077	•00264251
24	•00103885	•00246644	•00139228		• 00244663
INCHES	6	7	8	9	10
1	•03960896	•04133014	•02988356	•03758128	•17763702
2	•05917497	•08095990	•04980746	•06382656	•26039629
3	•07311667	•07564637	•04643615	.08429885	•25025959
5	•09267060	•04884302	•04650813	•10309417	•19596842
8	•04279 963	•04159499	•03469181	•0497,2691	•10201298
12	•03023147	•01544949	•02358684	•02286933	•03887185
18	•00499099	•00701967	•00527326	•00851759	•01262021
24	•00402919	•00125133			•00222411
	****	TATAL CLASS	TOTAL DOGE :	LINE NO ELIZA	
INCHES	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
1	1.00000000 .87500000	1.41420712 1.35110639	6•76643716 6•17499900	1 • 414.20712	2.26725767
1 2	•77699999	1.26869515	5.55784161	•98287395 •68164783	2.30001681
3	•69499999	1.12363737	4.66498507	•47375939	2.38379070 2.16251201
5	•54399999	•89546243	3.32183003	•22768736	1.81262597
8	•33499999	•50463966	1.64566146	•07636717	1.03633741
12	•17100000	.26870918	•72745140	•01697049	•56716906
18	•04200000	•06618160	•19160899	•00141422	•13200449
24	•01200000	.01484883	•03472963		.01484883

·	RUN NUMBER 595	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 8.747554	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	• •
	3.000000	.707110	.000010	1.414207	6.505353	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 301L (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	•
15.2400	15.2400	•	•			
	· · NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		.*
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	· FACTOR	FACTOR
1	.001000	.000722	•000100	•042000	•055383	•007705
2 '	.002000	.001595	•000205	.033000	.038716	•004966
3	•001000	.000873	.000154	.025000	.027464	•004836
4				.028000	•030446	.008604
5	.002000	.001745	•000759	.031000	.045291	•019692
6	.003000	.002983	.002010	.052000	.080160	.054021
7	.001000	.000873	.000740	.029000	•044559	.037778
8				.030000	.041173	.036697
9		•		.080000	.106691	.097413
10	•002000	.001595	•001526	.092000	.141529	.135376
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•004000	•007639	•002618	.061000	-116501	.051891
ż	•004000	********	*********	.050000	.095493	.053436
3	•003000	.005730	.002862	.060000	.114591	.061272
4	•004000	•007639	•003224	.070000	.133690	.066638
5	0004003	***************************************	***************************************	.033000	.063025	.060583
6	•001000	.001910	•001786	.051000	.097403	.089171
7	•001000	•001710		.045000	.085943	.080829
8				.025000	.047746	.041961
9				•007000	.013369	.037318
1Ó				•015000	.028648	083215
11		1		•011000	.021008	074150
12				.014000	.026738	.077015
				••••	***************************************	
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.012000	.005493		•012000	•010385	.005493	000330
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.442000	.611411	407089	019152	.805172		•546000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.	•	
4604.405236		0.82437		1.29993		

					UNIONALED /	
	SCATTERED FLUX	PFR	NEUTRON AT RE	GION BOS. IN	FNERGY GROS.	
	INCHES 1		2.	3	4	5
	•0682	7000	•05822802	•08553703	•05985101	_
1						•04717800
			•13524213	•09017464	•09732872	•11916013
2	•1250		•17375384	•10868076	•13972825	•12884953
. 3			•19713884	•11424986	•12905266	•12321833
5			•17341614	•09203964	•07212913	•07863011
8			•08262629	04600712	•03307457	• 05753658
12			•04035422	•01421892	•02116781	• 00925623
18	•0121	8764	•00895222		. •00240027	• 00209483
24	•0028	5062				•00327049
	•					
	INCHES 6		7	8	9	10
	•1394:	3551	·12357001	•07618200	•25825151	• 30556599
1	.2214	5012	•18881611	•12581764	.28953874	•54561552
. 2	•2493	3796	•15650829	.12027996	.28489923	.42632795
3	• 2045	5337	•16424868	•14654686	•23575575	• 32449973
5			•07293485	•08449133	13652685	•17147107
8	•0549		•02367078	•04922955	•03803576	•04879995
12			•01996895	•01407758		
18			•00517683		•01296050	•01287506
24				•00706699	•01395863	• 00249258
27	•0012	1470	•00143870	•00446764		
	CCATTERED FLIN	T D A N		55W 5006 W		
	SCATTERED FLUX INCHES 1	IKAN		EGY - GRPS - VS		-
	INCHES 1		2	3	4	5
1	2102		•00683688	•011979.22	•01201016	• 03373987
2			•02021923	•02906098	•03507933	•04963281
3	•02938		•02403137	•03717332	•03620037	• 0459 [:] 8465
5	•06256		•06573487	•05063798	•02651607	•04125487
8	•0494	2345	•02861838	•02997379	•01786903	• 02460554
12	•0298	8553	•01507889	•01003696	•00914270	• 00352036
18	•00694	4676	•00387209		•00240027	• 00209483
24	•00289	5062				• 00327049
	INCHES 6		7	8	9	10
1	•06156	6313	•09383594	•03528959	•09881073	•37013870
2	•0971	1824	•06777280	•05350422	•14172505	• 33553646
3	•07650	00.98	•06977212	•07182108	.12992672	-26704950
5	•07049	9769	•05166134	•04830995	.08573924	•14760248
8	•03790	0609	•01122112	•02972551	.02912301	•04879995
12	•00796		•01196895	•00774751	.01186324	•01287506
18	.0038		•00517683	•00218344	.00987359	• 00249258
24	•0012		•00143870	•00446764	*00701339	000247230
•	***************************************	. 470	400143070	***********		
•						
	TOTAL NO) .	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
	INCHES TRANS./	_	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BOS.
	1.00000		2.92380562	13.98928537	2.92380562	4.10086862
1	•78099		2.10131668	9.56683458	1.37711246	
2	•63999		1.49482354			3.31523149
3				6 • 28428016	•64616102	2 • 55955571
	•52999		1.09192222	4 • 29332899	•30407576	2 • 12953102
5	•38799		•71776620	2 • 25254447	•06724751	1.33350012
8	•18500		•31311348	•80960027	•00584760	• 57897554
12	•08000		•12008517	•27347567		•23158558
18	•02300		•03886876	•11055039		•05815836
24	•00800	0000	•01324241	•03628228		•01324241

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 18,085150	
	INC. ENERGY 3.000000	COS. THETA .342020	CUTOFF EGY	INC.FLX/NT 2.923806	INC.DSE/NT 13.449506	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 80IL (100%	SATURATED)		
	_	ION THICKNESS			•	
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX TRAN.FACTOR	DOSE TRAN. FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1 2	•002000	•001021	•000142	.039000 .035000	.023350 .019915	.003249 .002554
3				.039000 .032000	.029255 .020470	.005151 .005785
5 6	.002000 .001000	.001093 .000422	•000475 •000284	.031000 .074000	•016136 •047690	.007016 .032139
· 7	.001000	.000422 .000422	.000358 .001196	.057000 .040000	.042263 .026056	.035832
9 10				.094000 .131000	.088327 .104510	.080647 .099966
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	•001000	•001910	•000093	•095000 •054000	.181436 .103132	.036734 .026709
3	•002000	•003820	•000894	.063000	.120321	.034095
4	.001000	.001910	•000683	•074000	.141329	.036690
5	•002000	•003820	•000736	•051000	.097403	•045957
6	•001000	•001910	.001143	.038000	.072574	.035604
7 8	.001000	•001910	.001143	•047000 •067000	.089763 .127960	.037585 .066794
9				.015000	.028648	.043207
10				.021000	•040107	.058191
11				.018000	.034377	.044970
12				.029900	.055386	.097945
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT. .002456	NO. FACTOR	TRAN. FACT.	TRAN. FACT. .004300	TRAN. FACT. .002456	TRAN. FACT. 0,00217
NUMBER REFL. FACT. .572000	NO. FLUX REFL. FACT. .417972	DOSE REFL. FACT. .295562	ENERGY REFL. FACT. 026198	ENERGY ABS. FACTOR .735843	NUMBER ABS. FACTOR	NO. CUTOFF FACTOR .420000
		MEAN ENERGY	-	MEAN ENERGY		
4604.405236		SCAT.TR.NT. 0.81206		REFL. NT. 137404		

					•
	ERED FLUX PER 1		•		
INCHES	1· •03709692	2 •05018319	3 •02314629	•01913710 '	5 • 02750839
1	•11342755	•07624909	•04141702	•05529008	
2	•12025395	•11844779	•03134746	•04507974	• 06668520
3	•13504791	•14195218	•07389571	•07104621	•07003215
5	24517225	•17588597	•10010237	•10713658	•08991195
8	•19611925	•17135640	.08186330	•06020010	.08591799
12	•11061296	•07448366	•02765016	•03662401	.05149184
18	.09238742	.04287708	•02034082	.03390584	.02246789
24	•01506265	.00539425	•00283084	•00625876	•00100510
INCHES	6	7	8	9	10
	•04242518	•04606158	•08671626	•09516149	.13539768
1	•10472605	•10302604	•12021607	•12919472	.24510753
2	•15340175	•17424558	•19306064	•19494771	•26228371
3	•17361249	•23567146	•21443034	•18595176	. • 27654701
5	•16105418	•17409876	•22931722	•13222010	• 30302640
8	•11526851	•13925324	•15733061	•10044811	•24590253
12	•04972533	•14500848	•11954836	•04106879	•14978131
18	•03794496	•03933703	•05414485	•04716007	•06116114
24	•00465222	•00709460	•00841389	•00372388	•02236027
	ERED FLUX TRANS		EGY. GRPS. V		
INCHES	1	2	3	004 5 6 0 6 4	5
1	.00139700	•00244256 •01175781	•00332708	•00654944	• 00574224
2	.00118700 .01175726	•01175781 •01660609	•02154352	•00544950 •00682828	•01011305 •02120114
<i>5</i>	•02164818	•02931815	•02154552	•02684454	•02120114
8	•03133369	•03116467	•01413242	•01846316	• 02567439
12 .	•02077101	•01817751	•00801057	•01106039	•01247707
18	•01017891	•01461565	•00505750	•01650950	•00901523
24	.01506265	•00539425	•00283084	•00625876	.00100510
INCHES	6	7	8	9	10
1	•02298416	•01798449	•02363568	•04896347	-11518780
2	.02515270	.05562829	•05915271	.08074034	.19076527
3	.03099535	.06339293	•07367099	•10455590	.19453880
5	.03686879	•06651707	•09172021	•06612182	.23676768
8	.04878079	.07713386	•07896587	•05146326	.16704634
12	.02676502	.06591878	•07598454	•01976732	.13328622
18	.01593402	+02125016	•03039493	•02295087	.04670268
24	•00465222	•00709460	•00841389	•00372388	•02236027
111615	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
•	1.00000000	1.00000000	5.76923077	1.00000000	1.54173669
1	•94400000	1.05481693	5.82803295	•80800000 •5300001	1.85262985
2	.88099999	1.09294667	5.84987052	•65300001	2.01275353
3	•82999999 7130000	1.07209026	5.44336348	•52699999	2.10518721
5 8	•71299999	•96398536	4.56743694	• 34400000	2.06192577
8 12	•53199999 •31499999	•72515846	3•17884829 2•05695063	•18100000	1.53466005
18	•14700000	•46921844 •21360946	•83101560	•07700000 •02100000	•88299490 •47272713
24	•05300000	•08179647	•28012221	•00500000	•08179647
₽ ▼	****	100117071		-00200000	400712041

,	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 5.117966	
	INC. ENERGY 5.000000	COS. THETA 1.000000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 5.800000	•
SLAB CONFI	GURATION NEV	ADA YEST SIT	E SOIL (100*	. SATURATED)		
		ION THICKNESS	ES (CENTIMETE	RS)		•
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	,
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL FACTOR	DOSE REFL. FACTOR
1	.007000	.015541	•001715	.024000	.037097	.004093
2	.004000	.005394	•000549	.024000	.050183	.005105
3 ·	.002000	.002860	.000399	.014000	.023146	.003232
4	.004000	.006369	.001428	.009000	. •019137	.004289
5	.001000	001011	.000348	.019000	.027508	.009486
6	.003000	.004506	•002408	.025000	.042425	.022676
7	.004000	•007082	•004884	•026000	•046062	.031767
8	.005000	.011142	•008260	•044000	.086716	.064290
9 10	.003000	.003711	•003007 •020706	.043000 .061000	.095161	.077114
10	•015000	.021836			•135398	.128394
	NUM	IBER OF SCALTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.009000	.034377	•027820	•032000	.122231	.071653
2	.003000	.011459	•005637	.029000	.110772	.058570
3	•006000	.019098	•017699	•026000	.082760	.052889
4	.002000	.006366	•003446	•022000	.070028	.052471
5	•004000	•012732	•007481	•020000	.063662	.045483
6	•008000	.025465	•015506	.018000	.057296	.042941
7 8	.002000 .004000	.006366 .007639	•007771 •004629	•017000 •034000	.054113 .064935	.044055 .056810
9.	•003000	•005730	•002659	•030000	.057296	•068322
10	.002000	.003820	•003329	•012000	.022918	.035447
11	.002000	.003820	•004649	•017000	.032468	.059565
12	.003000	.001432	•005084	.032000	.015279	.060336
(S+U') NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•053000	.048706	•.005000	•048009	•079451	.043706	0,02073
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.289000	.562834	• 350445	011930	.854966	.076000	.582000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		•
5805.502618		215927	•	206402	•	,

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 5.00000000 .86603000 .00001010 2A

	CCATTE		NEUTRON AT RE	STON BOS. IN	ENERGY GROS.	, Y
		CED FLOX PER I	אבטואטא או אבי		4	
	INCHES	1	2	3	•	
_		•06474251	•03227200	•01948252	•01362252	•03283953
1		•12411700	•07838855	•07543876	•03307582	05841555
2		15228501	•13623056	•07175357	•07437478	•08518714
3		.12481759	•15056789	•08057265	•08221570	•07911236
5		·17261545 ·	•15333707	•06452403	•05785311	•05975131
8		.19540235	•16584789	•09731009	.05363481	.08184975
12		. 14165613	•10605198	•04550761	•03899827	05099382
		· · - -	•			
18		•05356566	•04926031	•03854446	•01717024	•01923679
24		•00549070	•00771457		•00116832	•00694959
		•				
	INCHES	6	7	8	9	10
		•08613202	•06408400	•05642949	•08327101	•20176098
1		.11621547	•09966926	•11331978	•11551051	•28392863
· Ž		.14779181	•16474599	-18841591	•13337004	• 35040653
3		.10533446	•16564481	•16862239	•13654316	•34336853
5						
		•15315176	•18660306	•15479037	•12638717	•28419851
8		•11902127	•15326870	•17988570	•12432049	•23398229
12		•08749164	•10230268	•09042350	•05480921	•12218315
18		•03182279	•02074693	•03746122	•01295088	•04172123
24		.00123910	•00761724	•00787151	•00370315	•00812816
_						
	CCATTER	RED FLUX TRAN	C DED AT IN	EGY. GRPS. V	S. THICKNESS	
				_		•
	INCHES	1	2	3	4	5
1			•00465688	•00287944	•00234079	•00956844
2		.01430258	•01399534	•01525510	•01107683	•01601510
3		•00597353	•01707026	•00853063	•00817795	•02397307
5		•02646225	•02537461	•02530532	•02038118	.01425878
8		.02620881	•02690197	•01636811	•01375279	•01931225
12		.03002582	.03128977	•01135077	.01171986	.02198624
18		.01629079	.02070516	•01947515	•00602446	•01196030
24		•00549070	•00771457		•00116832	•00694959
24		*00545010	*00//145/		***************************************	********
			_		•	• •
	INCHES	6	7	8	9	10
1		•01887336	•01809710	•03286559	•04997139	•12790729
2		•02599595	•04756186	•07347642	•04807543	•21188973
3		.02733462	•06886103	•07336102	•07806111	.22718878
5		.03065458	•06243745	•07893467	•05793412	.23381380
8		.03765389	.06647698	.08610460	•06952037	.16870607
12		.02781227	•04988244	•04576828	•03617708	.09845113
18		•01047025	•01281805	•02613296	•00610847	•04038027
			•00761724	•00787151	•00370315	•00812816
24		•00123910	*00/01/24	•00101131	•00310313	*00915919
		TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
	INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
		1.00000000	1.15469441	6.66169852	1.15469441	1.77940184
1		.92100000	1.17013130	6.48453157	•90297104	2.00105038
2		.85799999	1.18316262	6.19480784	•70551828	2.21007964
3		.78199999	1.09047594	5.61914237	•55194393	1.98874347
5			•91272754	4.36207549	•33717077	
		•64699999				1.75038260
8		.48099999	•69150837	3.09328804	•16050253	1.56552586
12		•28699999	•42450777	1.67780880	•06004410	•90046211
1.8		•11000000	•18306750	•60567072	•01270163	.33518215
24		•03600000	•05219172	•17054532	•00230939	•05219172

			,			
	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 5.909686	,
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC . DSE/NT	
	5.000000	.866030	•000010	1.154694	6.697228	
			•			
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 301L (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	(RS.)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400	243400	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		101-000	
		_				
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•003000	.005099	•000563	.039000	.056069	.006187
2	.006000	.007043	•000716	.018000	.027948	.002843
3 .	•00000	•00.043	•000.10	.012000	.016872	.002356
4	.001000	.001069	.000240	•007000	.011797	.002644
5	.003000	.007707	•002657	.016000	.028440	.009807
6	•001000	.001069	•000571	•035000	•074593	
. 7	•006000	•006859	•004730	•041000	•	.039869
8		•		*	.055499	.038275
	.005000	.009029	•006694	•038000	.048870	.036231
9	•003000	.003206	•002598	.038000	.072115	.058438
10	•006000	.006859	•006504	.088000	.174731	.165693
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	-005000	•009549	•005855	•059000	•112681	4054948
ž ·	•007000	.013369	.006042	.037000	.070665	.050287
3	•006000	.011459	•007879	•060000	114591	.069697
4	•007000	.013369	•010026	•045000	.085943	.061804
5	•002000	•003820	•000716	•024000	.045836	.049949
		-				
٠ 6	•005000	009549	.007124	.023000	.043927	.048919
7				•024000	•045836	.048079
8	•			•019000	.036287	.028738
9				•009000	.017189	.059948
10	.001000	.001910	.003374	•008000	•015279	.051683
11	.001000	•001910	.007253	.013000	.024828	.088860
12				•01.1000	.021008	.079110
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO. FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.036000	.027274	•002000	.034000	.047939	.025274	0.01213
MUMOSO	NO FELLE	Docs	ENERGY	ENERGY AGE	MUMBER ASS	NO 607555
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.332000	•566935	.362343	014190	.843970	.071000	•561000
		MEAN ENERGY		MEAN ENERGY	r	
		SCAT.TR.NT.		REFL. NT.		
5805.505236		1.78363		213698	r	

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 599 5.000000000 .70711000 .00001010 24

							000		EUEDCW CD04	
			PER		KE	GION		IN	ENERGY GRPS.	•
	INCHES	1.		2			3		4	. 5
		•05894		•0482440			3215			•03785603
1		•07531		•1152220		,	5653			•09946506
2		• 15323		•1309503	-	_	6840			•08550788
3		• 14783		•1480973		_	8245	-		.10095266
5		• 2323		•1775250			8155			.10745325
8		.16899		•1.124316			4291			•08879607
12		.11683		•0779983		_	3353		•04358238	.02959414
18		.0289		•038096			3754			•00681201
24	•	• 0020	210	•0021507	74	•0	0265	1.25	•00320370	
				-			_		•	• •
	INCHES	6		7			8		9	10
		•09974		•1195090		_	8621	-		•23209699
1		•11613		•1440759			6294			•36223302
2		•13909		•1989186			.9762	-	•22008790	•34817420
3		•17856		•2535243			9947			•34026110
5		•13747		•1533280			7301		•14559858	• 33336746
8		•0788		•1356728		-	4826		•05798981	.18578826
12		•11553		•0715077			7022			•07011781
18		•01834		•0178102			2833		•01753126	.02793344
24	•	•00589	7839	•0036954	+2	•0	0208	777		•00344919
								_		
	SCATTERE		IKA		1 M	EGY.	GRP	5.		
1	INCHES	1		2	. =	_	3	004	4	5
1		01517		•0033644			0939			÷01484838
2		•01517		•009399!			0100	_	•00471797	•00875807
3		•01048		•0114602		_	1324		•00978216	•01119740
! 5		•02917		•0308869	_		1926		•02768193	.02284176
. 8		•03783		•041387			1391	-		•02515987
12		•01733		•0312989			14984		•01482604	•01471051
18		•00588		•0148680			1136		•00356888	•00397553
24	+	•00209	210	•0021507	74	• 0	0265	152	•00320370	
	11151156	,		-			•		0	1.0
	INCHES	6		7		_	8		9	10
1		•01723		•0129512			2837	_		•17775964
2		•03273		•0383063			6605			•22562339
3		•03201		•0755001			8534		•13392360	•23156297
5		•05455		•0798290			8866		•07091928	•23030406
8		•02663		•0836462			85489		• 04249248	•15132762
12		•04776		•0245020			3858		•03276265	•06432572
18		•01360		•0107023			1294		•00886952	•02559932
24	•	•00589	1837	•0036954	+2	• 0	0208	""	•	•00344919
										•
				TOTAL FLOOR	,	7074			LINE NO ELL	TT: 51 4 44 .
		TOTAL NO	-	TOTAL FLUX			L DO		UNC.NO.FLUX	TTL.FLX/NT.
	INCHES 1	TRANS./	-	TRANS./NT			15./N		TRANS./NT.	REGION BDS.
		1.00000		1.4142071		-	5888		1.41420712	2.20663212
1 2		• 89 800		1.3784090	-		3358 0256		1.04651327	2.40982840
3		-		1.1872639			2492		•77357130	2.35759981
5		•72799 •58709					7987			2.31118788
8		• 58 799		•9666554 •6633190			5039			1.94698490
12		•41099								1.20090446
		•22399		•3378695			4498	-,	•03676938	•72061056
18		•07500		•1170380			9945		•00565682	•24042514
24	•	•01900	,000	•025188	0	• 0	7175	425	,	•02518856

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 7.237864	
	INC. ENERGY 5.000000	COS. THETA .707110	CUTOFF EGY	INC.FLX/NT 1.414207	INC.DSE/NT 8.202401	•
SLAB CONFI	GURATION NEV	ADA TEST SIT	E 301L (100%	SATURATED)	•	
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		,
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400					
	· NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		•
ENERGY	NÓ. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.002000	.001445	.000159	.031000	.041680	.004599
ž	.002000	.001595	.000162	.029000	.034114	.003470
3	.002000	.002110	.000295	.020000	.022736	.00317:5
4	.001000	.004183	.000937	.014000	.018316	.004105
5	• • • • • • •			.021000	.026768	.009230
6	.004000	.004005	.002141	.050000	.070529	.0376,96
7	.003000	.002467	.001702	.057000	.084506	.058280
8	.002000	.001445	.001071	.057000	.060967	.045199
9	•••••	• • • • • • • • • • • • • • • • • • • •		.035000	.056281	.045607
10	.003000	.002618	.002482	.099000	.164118	.155629
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
	NO TOAN	NO TRAN	OOSE TRAN	NO. REFL.	NO. REFL.	DOSE REFL.
. ANGUL AR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	FACTOR:	FACT/STER	FACT/STER
SECTORS	FACTOR	FACT/STER	FACT/STER	•055000	•105042	•040482
1	•007000	.013369	•003634 •004942	•055000	.105042	.048055
2	.004000	•007639	.001319	•061000	.116501	•059422
3	•002000	.003820	•003620	•060000	.114591	.060680
4	•003000	•005730	•003620		.055386	.048619
5				.029000	•	.071051
6				.040000	.076394	
7	•002000	•003820	•001787	.035000	.066845	.061451
8			170-	.030000	.057296	.049725
9	•001000	•001910	•001790	•010000	•019099	.055145
10			•	•015000	.028648	.086684
11				.015000	.028648	.082952
12				. •008000	•015279	•036635
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT . NO . FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•019000	.008950		•019000	.019867	.008950	. 0,00541
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.413000	.580015	•366992	016574	.828841	•066000	.502000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.505236		1,42408		. 2,00655		

	SCATTERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
ÌNC	HES 1	2	3	4	5
• • • •	•05922251	•04412601	•04709953	•04212550	•04472702
1	•11337541		•06197569	•05981803	.08844674
2	•15623241		•07545487	•06172984	•06809852
	· ·				
3	•17808765		•09415229	•05534281	•10019016
5	•16433129		•06396676	•08693852	•07373362
8	•14775587		•06575551	•04030976	•05841516
12	•07464163		•04853892	•01319626	•02614469
18	•01163354		•00586750	•00378163	•01653717
24	•00223467	•00382790		•00615310	•00268287
1 81 (HES 6	7	8	9	10
214	•08802001		_	-	
,			•12918148	•19653100	• 38056849
. 1	•12629695		•17113810	•24371089	•55140183
. 2	•16819745		•19978696	•19207648	+49579118
3	•15719268		•20046526	•16707855	•36487070
5	•13539880		•20039042	•12382172	•24339971
8	•09742030	•08392694	•10454841	•03361647	•09737800
12	•03499860	•04133478	•04569185	•01934094	•02553262
18	•01291273	•01343169	•01096132		•00431938
24		•00113129	•00292066	•00170258	
				4	·
	CCATTERED ELIDE TRA	DEB NE IN	56W 58B6 W		
	SCATTERED FLUX TRA		EGY . GRPS . V		_
	HES 1	2	3	4	5
1		•00367630	•01235415	•0010290Q	•00769665
2	•00861842		•01792434	•01700657	•01478369
3	•02242977	•02628520	•02279002	•02368172	•03148037
5	•02919806	•04485028	•02194302	•04101098	•01152753
8 .	•04054933	•03165264	•02141592	•01308995	• 02302534
12	•02715236	•01760443	•01343470	•00714566	•01319372
18	.00123435	•00851118	•00467055	•00378163	.00525929
24	•00223467			•00615310	.00268287
		_	_	_	
	HES 6	7	8	9	10
1	•01877179		.04491872	•09750286	•34237460
2	•03995345		•07595503	•10252002	• 35236727
3	•05378320	•05802623	•10457422	•09031681	• 32057032
5	•05963585	•06034827	•11031510	•08523479	•22120169
8	•04049093	•05254227	•07863515.	•02615089	•08919372
12	•01198505	•02956717	• 02958294	•01689123	02553262
18	•01050768		.00958597		.00310116
24		•00113129	.00292066	.00170258	

	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INC	HES TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.0000000		16.86810937	2.92380562	4.02715484
1	•77599999		11.92264954	1.56715984	3.28016588
2	•63099 99 9		8 • 17807040	•83913222	2 • 6475.7628
3	•54299999	1.20420395	5-85252599	•45026609	2.06397559
5	•40999 99 9	•81391302	3.47107735	•12864747	1.51124115
8	•25799 99 9	•43428898	1.54338958	.01754281	.85379672
12	•12600000		•59216743		•37715314
1.8	•03700000		•16371754		-10194343
24	•01300000		•04306365		•02065307
e	•0130000	101003301	-0-700303		+ UE VO 2 3U 1

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 14.963938	
,	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC . DSE/NT	
	5.000000	.342020	.000010	2.923806	16.958073	
SLAB CONFI	GURATION NEV	ADA TEST SIT	E SOIL (100%	SATURATED)	•	
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	•002000	•000771	•000085	.026000	.020255	.002235
2	.003000	.001443	•000147	.020000	•015092	.001535
3				.023000	.016109	•002250
4	•002000	•002694	•000604	•022000	. •014408	.003229
5	.002000	•001021	.000352	•028000	·• 015298	•005275
6				.047000	.030105	.016090
7	.001000	.000422	.000291	.066000	•051716	.035666
8	.002000	.001093	•000811	.058000	.044183	.032756
9	.001000	•000671	•000544	.074000	•067218	.054469
10				•145000	.130162	.123430
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.003000	.005730	•000372	•070000	.133690	.031306
2 '				•060000	•114591	.027484
3	.002000	.003820	•001153	•057000	.108862	.031051
4	.002000	.003820	.000171	.061000	.116501	.028953
5				•034000	• 064935	.026580
6	.002000	•003820	.001081	•040000	•076394	.032605
7	.001000	•0 0191 0	•000442	•042000	•080214	.035222
8	•002000	.003820	•001326	•049000	.093583	.044114
9				.018000	•034377	•041275
10				.022000	.042017	.061880
11	.001000	.001910	•000866	.025000	.047746	.077015
12				.031000	.059205	•091424
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN'.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN'. FACT.	TRAN. FACT.
•013000	.002833		•013000	.008115	.002833	000212
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ARS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•509000	•404545	.276936	.023977	•.758094	•077000	.401000
		MEAN ENERGY	•	MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
5805.505236		.081687		2,35534		

SCATTERED FLUX PER NEUTRON AT REGION BDS. IN	ENERGY GRPS.	
INCHES 1 2 3	4	5
.07414144 .02195429 .02213490	•01507999 •02	591229
1 •05492191 •05661344 •03831035		070612
2 •07564305 •08731859 •05613625		739002
3 .12598503 .08914616 .05802533		611353
5 •14064132 •08046911 •05972348		850505
8 .13606755 .08341364 .02131152		586169
12 .09599224 .07013809 .03089998		254475
18 •03924291 •03780276 •01190750		479051
24 .00859301 .00831644 .00234821		217375
24 ************************************	100424404 100	
INCHES 6 7 8	9 1	.0
•04076199 •06495431 •06108319	-	111492
1 • 09000305 • 08732816 • 08506422		041125
2 •08821353 •14257008 •08935282	· · · · · · · · · · · · · · · · ·	684992
3 .09697632 .14164312 .11102388		120591
5 •07335795 •12574681 •07553725		376392
8 •11936582 •10677229 •07376763		441193
12 •09367284 •06096677 •04429366		427360
18 • 04632596 • 03855642 • 03004236		487403
24 •01139338 •00748152		579731
24 ************************************	•00191949	717131
	•	
SCATTERED FLUX TRANS. PER NT. IN EGY. GRPS. V	S. THICKNESS	
INCHES 1 2 3	4	5
1 •00979900	•00112070 •00	407197
2 •00293426 •00795462 •00513582		629950
3 •00776543 •01387756 •00955467		859421
5 •01450253 •01250725 •02327360		400870
8 • 02716234 •01881253 •00769093		618689
12 .02831834 .02004107 .00908871		632864
18 •01900027 •00573628 •00373930	• • • • • • • • • • • • • • • • • • • •	423919
24 • 00859301 • 00831644 • 00234821		217375
24 800057501 800051044 800254021	100434484 100	211313
INCHES 6 7 8	9 1	.0
1 •01282939 •01759729 •01299049	•	3951712
2 .02847009 .03023274 .01934377		930205
3 •02875935 •05099591 •03805676		101650
5 •03443375 •04677460 •03970403		843918
8 •05109297 •06363296 •03453279		2007674
12 •03160554 •03724055 •02658835		956989
		448192
18 •01439670 •00849103 •01194852 24 •01139338 •00748152		579731
24 ************************************	•00171343 •04	1313131
TOTAL NO. TOTAL FLUX TOTAL DOSE	UNC.NO.FLUX TTL.F	LX/NT.
INCHES TRANS./NT. TRANS./NT. TRANS./NT.		N BDS.
1.00000000 1.00000000 7.00000000		7824942
1 •91800000 •99748395 6•71020701		7888974
2 .8620000 .98794533 6.71020701		471460
3 •79899999 •96687262 6•06085717		478420
5 .67599999 .85755498 5.06422679		618846
8 •51299999 •70614421 3•84433563		9592508
12 •3179999 •45630299 2•34230726		312174
18 •15400000 •21519741 1•11659862 24 •07200000 •10256190 •49344259		31679
Z# #U/ZUUUUU #IUZDBIYU '#4Y344Z3Y	•01000000 •10	256190

		•	•			
	RUN NUMBER	HISTORIES 1000	ENERGY SET 2	ANGLE SET 2541	SLANT MFP 4.586730	
	INC. ENERGY - 14.000000	COS. THETA 1.00.0000	CUTOFF EGY •000010	INC.FLX/NT 1.000000	INC.DSE/NT 7.000000	•
SLAB CONFT	GURATION NEV	ADA TEST SIT	E SOIL (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	,
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	• 006000	•008477	•000775	•031000	•074142	•006779
2	•006000	•008257	•000696	.015000	.021956	.001851
3	.002000	.002382	•000276	.009000	.022135	.002561
4	.002000	.004507	.000837	.007000	.015080	.002801
5	.002000	.002184	.000624	.014000	.025912	.007404
6	• • • • • • •	• • • • •		.024000	.040762	.018052
7	.005000	.012140	•006937.	037000	.064954	.037117
8	.006000	•007494	•004603	.027000	.061083	.037523
9	.001000	.001843	.001343	•016000	•034104	•024847
10	•032000	.048404	•047021	.063000	.141115	.137083
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.010000	.038197	•034742	.017000	.064935	.025009
2	.007000	.026738	•016227	.017000	.064935	.039843
3	•007000	.022282	.014309	.023000	.073211	.039188
4	•007000	•022282	•014177	.013000	.041380	.024183
5	•004000	.012732	.008638	•024000	.076394	•059772
6				.018000	.057296	.047754
7	•006000	•019098	.021083	.019000	.060479	.046627
8	.007000	.013369	•012915	.027000	.051566	.042555
9	•007000	.013369	.014531	.019000	.036287	.034826
10	.002000	.003820	•004423	.018000	.034377	.042884
11	•003000	.005730	.010829	.018000	.034377	.056418
12	•002000	•000955	•004357.	•030000	.014324	•046882
(5+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.072000	.073113	•010000	.062000	•095690	.063113	0.02770
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.243000	.501243	.276016	.006041	.901887	.281000	•404000
		MEAN ENERGY		MEAN ENERGY		
		SCAT .TR.NT.		REFL. NT.		
7006.802618		6.25474		348041		

				•	7	
	SCATTERED FLUX	PER NEUTRON	AT REC	ION BDS. IN	ENERGY GROSA	7 7 7
	INCHES 1	2		3	4.4	*
	•03586	_	02101	01192553	•01265402	•03131252
1	•04727		61820	•02267708	•05012249	
1.				, · . - ·	, , , , , , , , , , , , , , , , , , ,	05809509
2	•08014		11380	•04707648	.03153594	•05448157
3	•14172		61593	.08043614	•04968769	• 04755715
5	•16117		24392	•07282433	•03387222	•07585305
8	•11432	2144 •118	316751	•05964562	•06408423	• 05671105
12	•12136	8.047 •095	94122	•04265827	.02533910	•04951935
18	•04640	0317 • 022	80103	•03190062	.01890372	.00871515
24	•00334	4626 •012	31738		.00183540	4
_						•
	INCHES 6	•	,	8	9	1.0
	.05296		57751	+04640904	•05306301	14980002
,	•08593		76255	•06642892	•07648216	
1						• 25273592
2	•11124		43053	•08010892	•08790939	• 32626727
3	•13465		10847	•09986734	•09488240	•40152642
5	•09145		47053	•11128077	08365051	• 38964067
8	.08813		86804	•06121533	•06396486	• 27290223
12	•08121	1150 •068	52881	•06288768	•05787305	.18568599
18	•01946	6349 •034	44656	•03003033	.01309495	.08684433
24	•02258	8968 •007	19032	•00389243	.00665303	•02711311
	_					1
	SCATTERED FLUX	TRANS. PER	NT. IN	EGY. GRPS. V	S. THICKNESS	
	INCHES 1	7 KANOT 1 EK		3	.4	5
1	14CHES 1	•	•	•	•00660277	.00391523
	00276	0500 003	200005	00852404		
2	•00279		90005	•00853696	•01252826	•01011752
3	•00621		87698	•00828444	•00148602	.01568681
5	•02344		87326	•01285912	•00164902	•01904487
8	. •02364		97049	•01651500	•01165322	•01412549
12	•02166	6620 •027	212547	•01209138	•003384 <u>6</u> 7	•00835069
18	•01253	3564 • 003	54682	•00474509	·00142880	•00643009
24	•00334	4626 •012	31738		.00183540	
	INCHES 6	7	,	8	9	10
1	.0088	5355 .02	59692	•01242653	.02257064	•11256317
Ź	•02032		19911	•03314487	.04284782	-20556485
3	•01580		98024	•04745553	.03394967	•27568715
5				•04840207	•02464442	
	•0387]		42411			•31022632
8	•02774		29082	•02931660	•03378711	•22085336
12	•02068		30857	•01389994	•01963758	.15962310
18	•01080		76209	•01162849	.01179283	.06884725
24	•02258	8968 •00	19032	•00389243	•00665303	•02711311
	TOTAL NO	O. TOTAL	FLUX	TOTAL DOSE	UNC.NO.FLUX	TTLOFUX/NT
	INCHES TRANS./	NT. TRANS	/NT•	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000	0000 1-154	69441	8.08286087	1.15469441	1.63578312
1	•90500	0000 1.114	59373	7.57211340	•92606491	1.73619321
2	.83199		42940	7.20127202	.74246851	1.77378519
3	.77299		25088	6.74755861	.59582232	1.91188352
5	.64599		63473	5.57902883	.38335854	1.65582295
8	•46099		36452	3.57602427	.19745274	1.18546920
12	.28399			2.12978731	•08082861	•86585405
			60001		•020784A9	
18	•12000		330391	•85739496		.33338785
24	•05700	0.000 - •090	71107	•39412160	•00577347	•09071107

٠	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MEP 5.296272	
	INC. ENERGY 14.000000	COS. THETA .866030	CUTOFF EGY .000010	INC.FLX/NT 1.154694	INC.DSE/NT 8.082861	
SLAB CONFI	GURATION NEV	ADA -TEST SITE	SOIL - (100%	SATURATED)		
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
2.5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400			,	•	
	NuM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.003000	.003022	•000276	.022000	.031061	•002840
2	.004000	•008959	•000755	•014000	•020803	.001753
3				*009000	•010328	•001195
4	.001000	.001700	•000316	.009000	.010959	.002035
5		-		.014000	.027118	•007748·
6	.010000	.024110	•010677	.033000	.045871	.020314
7	.006000	.006491	•003709	.042000	.088835	•050763
8	.003000	.003653	•002244	.020000	.040192	.024689
9	.005000	.006421	•004678	.020000	.045954	.033481
10	.020000	.022609	•021963	.070000	.129731	.126025
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGU AD	NO. TRAN.		DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
ANGUL AR	· · · -	NO. TRAN.		FACTOR	FACT/STER	FACT/STER
SECTORS	FACTOR	FACT/STER	FACT/STER	•044000	• 084034	•035744
1	•013000	•024828	•016809		.055386	.031417
2 .	.005000	•009549	•004866	.029000	•	
3	.013000	.024828	•015940	.0370.00	.070665	.046197
4	•005000	•009549	•008835	•034000	.064935	.039643
5	.002000	.003820	•005518	.012000	.022918	.023635
6	•004000	•007639	•006395	.019000	.036287	.029612
7	.001000	•001910	•003153	•021000	•040107	.044817
8	•005000	•009549	•009877	•022000	.042017	.035696
9				•008000	.015279	.056045
10			•	.008000	.015279	.039818
11	•0,03000	•005730	•009490	.011000	.021008	.081677
12	.001000	•001910	•004333	.008000	.015279	•052970
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT .NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•057000	•049619	•005000	•052000	.076965	.044619	0£2051
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•253000	•450852	•270844	0.06884	•905638	.291000	•399000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
7006.805236		5,52266		3,80960		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 14.00000000 +70711000 +00001010 2

	ERED FLUX PER I			ENERGY GRPS.	
INCHES	1	2	3	4 01225054	5
	•04089154 •08846092	•03646102 •05511898	•01788301 •06008731	•01235054 •03328299	•03274852 •05467915
2	.12979484	•08225597	•06791783	.05309878	•07940160
3	•15915263	•13872402	•06037680	•03969019	.08693513
5	14028774	•13977790	•08068069	.05353863	.08506328
8	.08580207	•07726640	.05297485	.04080130	.04397940
12	•06779111	•08102412	02088145	•02337048	.03417024
18	03397659	•01343116	•01147231	.00674203	.00954230
24	•00406936	•00101643		.00247688	,
INCHES	. 6	7	B	9	10
	•04267953	•12407749	•06390352	•07129049	•16476099
1	•07864080	•12424325	•10205790	.09871510	•31191921
2	•09567589	•14100499	•13060002	•12449921	.38856562
3 .	•12767271	•16719956	•13714740	•09533687	. 38807851
5	•16149827	•15442183	•10402707	•09632717	• 30693129
8	• 12665295	•07576217	•07669688	•05009414	•24362856
12	.04869213	•06529903	•05774183	•04126737	•13085564
18	•01746317	•01086615	•01308205	•00360200	.05419031
24	•00727433	•00854167	•01392512		102024526
SCATT	ERED FLUX TRANS	C. DSO NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	ERED FEUX TRANS	2	3	.4	' 5
1	•		•00280155	.00577814	•00884703
2	.00167873	»00294571	•01142656	•00532397	.01654496
3	.00991711	•01340090	.01054512	.00634043	.02003702
5	.02154813	•02916679	.01946699	.02225596	.02792532
8	.02241684	•02842065	.01280249	+00911150	.00989990
12	-01394047	.03233222	.00788545	.00657311	.01868549
18	.01244710	•00398633	•00523897		.00647056
24	•00406936	•00101643		•00247688	
INCHES	6	7	8	9	10
1	•00907336	•02222765	•02708256	•04439501	•14902413
2	•02569697	•02670394	•03875672	•05332171	•26628868
3	.05137483	•05948360	•04326649	•05114829	•29996509
5	•04456634	•04959750	•05771827	•05162093	•25858288
8	•04397483	•03733211	•02599167	•02763876	-21098568
12	.01801895	•03187287	•02903290	•02260691	•11437046
18	•01152737	•00364660	•00845372	•00360200	•04908286
24	•00727433	•00854167	•01392512		•02024526
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
	1.00000000	1.41420712	9.89944987	1.41420712	1.97992113
1	.88900000	1.34826944	9.08786964	1.07904005	2.08624565
Ž	.79599999	1.27317069	8.29859147	.82448275	2.11729751
3	.72499999	1.19338683	7 - 40065488	•62790796	2.02822179
5	.58399999	•94872875	5.36058882	•36627966	1.68883352
8	•37899999	•59120826	3.21507208	•16263382	1.03629255
12	•22200000	•35047291	1.69067404	•05515409	.62624748
18	-0800000	•11435497	•53849030	•00989945	.18426752
24	•03500000	•05896326	•27419943	•00141422	•05896326

·	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 6.486586	
	INC. ENERGY 14.000000	COS. THETA .707110	CUTOFF EGY	INC.FLX/NT 1.414207	INC.DSE/NT 9.899450	•
SLAB CONFI	GURATION NEV	ADA TEST SITE	301L (100% SA	TURATED)		ч.
	REG	ION THICKNESS	ES (CENTIMETE	ERS)		
2.5400 15.2400	2.5400 15.2400	2.5400	5.0800	7.6200	10.1600	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRANAFACTOR	FACTOR	FACTOR	. FACTOR	FACTOR
1	•003000	.002983	•000273	.021000	.028915	•002644
2	.001000	.000722	.000061	.018000	.025782	•002173
3				.014000	.012645.	.001463
4	.002000	.001595	.000296	009000	.008733	.001622
5				.016000	.023157	•006616
6	.004000	•006800	•003012	.019000	.030179	•013365
7 .	.007000	.005807	•003319	•051000	.087736	.050135
8	.003000	•009238	•005675	•026000	.045187	•027758
9				.033000	.050410	•036727
10	.014000	•014925	•014499	.079000	.116504	.113175
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.009000	.017189	•007436	.031000	.059205	.024983
2	.004000	.007639	•003666	.039000	.074484	•034846
3	.008000	.015279	•009270	.032000	.061115	.030194
4	.008000	.015279	•010094	•054000	.103132	.052399
5				.017000	.032468	•025606
6	•001000	•001910	•000242	•022000	.042017	.033087
7				.024000	.045836	.028332
8				.025000	•047746	.046767
9	.001000	.001910	•003538	•012000	.022918	.059329
10	.001000	•001910	•007760	010000	.019099	.042029
11	.002000	.003820	•009814	•004000	.007639	.020769
12.				•016000	.030558	•089969
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•035000	.028133	•001000	• 0:3:4000	.042070	.027133	0.01217
NUMBER	. NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
.286000	.429249	•255679	007967	•907153	.281000	.398000
		MEAN ENERGY	-	MEAN ENERGY		
		SCAT . TR.NT.		REFL. NT.		
7006.805236		5,01190		3,90001		

*	SCATTER	ED FLUX	PER	NEUTRON	AT RE	GION BOS. I	N ENERGY GI	PS.	
	INCHES	1.		2		3	4	11.00	5
	_	.0466	7452	•0266	6351	•0289675	2 •02964	302	• 04430201
1		.0842	4970	•094	17450	•0465585			.087.58626
2		•0706	4129	•0656	8878	•0294321	4 .05785	5000	•10714705
3		•1364	3228	• 0633	39262	•0563799	9 .04826	122	•11757791
5		.1038	6913	•1042	20200	•0486621	5 •04891	201	.07001134
8		• 0645	7547	•0957	72069	•0354846	9 •04941	825	•04657669
1.2		.0688		•035	14197	•0111071	.1 •01711	963	02138468
18		•0310		. •0146	1151	•0049315	4 . •0010	3923	. 00781541
24	•	•0013	1054			•0011024	7		•00377466
.;	INCHES	6.		7		8	9		. 10
_		• 0664		•1153		•0845820	1 • 10409	198	•31474397
. 1		•1102		•1450		•0917934	2 • 10791	519	•48438530
. 5		•1143		•1642		•1227228	9 •17199	202	•49202606
3		•1322		•140		•1124669		761	•47433486
5	•	•1099		•1143		•0793677		503	•31074459
8		•0442		•0715		•0412493	7 •05797	7076	•17711215
12		•0364		•0357		•0218085		845	•07485142
18		•0033		•0142		•0084421		124	•02516175
24		• 00324	4301	•0036	2079	•0081226	0 •00374	871	•00599965
•	SCATTERE INCHES		TRAN.		IT. IN	EGY. GRPS.		IES\$	
1	INCHES	1		2	0220	3			5
Ž		•01586	0552	•0010		•0032660	_		•00610108
3		•0090		•0059 •0040		•0067004			•02736798
5		•0153		•0204	_	•0163985		-	•03040169
8	,	•0150		•0416		•0166486 •0121825			•02146554
12		-01874		•0191		•0052467			•01917902
18		•0148		•0044		•0052467			•00976010
24		.0013		****	7712	•0011024		743	•00209934 •00377466
1	INCHES	6		7		•	0		10
1	MCHES	•03197	7558	•0350	2014	8 •0211638	9	001	10
Ž		• 03696		•0608		•0373350			. •30976555
3		•03126		•0621		•0351027			•40016395
5		•02654		•0499		•0480792			•39406901 •27160046
8		.01917	_	•0460		•0337238			•14805741
12		•02407		•0096		•0137734		_	•06796312
18		•00330	-	•0142		•0084421			•02246926
24		• 0.0324		•0036		•0081226			•00599965
									•
	. 1	OTAL NO		TOTAL F	LUX	TOTAL DOSE	UNC.NO.F	LUX	TTL.FLX/NT.
I		RANS./N		TRANS./		TRANS./NT.	TRANS./N		REGION BDS.
		1.00000		2.9238	-	20.4666393			3.73558896
1		.76199		2.1112		14.3483828			2.96886012
2		.61899		1.6300	- /	10.4739032			2.35218117
3		.50999		1.2106	_	7.5125455			1.93178698
5		•37199	999	•7267		4.0525160			1.25700851
8		. 24599	999	•4312		1.9843253			•71606457
12		.12400	000	•1982		.8214735			•35015460
18		.04800	000	.0804		-30272084			•1152311]
24		•02000	000	•0309		•1299138	-		.03092242

	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET Øø	SLANT MFP 13.410707	
	INC. ENERGY 14.000000	COS. THETA .342020	CUTOFF EGY	INC.FLX/NT 2.923806	INC.DSE/NT 20.466639	
SLÁB CONFI	GURATION NEW	ADA TEST SITE	SOIL (100% \$	ATURATED)		
•	REG	ION THICKNESS	ES (CENTIMETE	RS)	•	
2,5400	2.5400	2.5400	5.0800	7.6200	10.1600	
15.2400	15.2400			1		
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.001000	.000422	•000039	.023000	.015964	.001460
. 2				019000	.009119	.000769
3	•001000	.000422	•000049	•017000	•009907	.001146
4				.014000	010138	.001883
5	.001000	002023	•000578	.028000	.015152	•004329
6	•002000	.001093	•000484	.037000	.022724	.010063
7	.003000	.001193	•000682	•054000	.039469	.022554
8	•004000	•003144	•001931	•042000	.028929	.017771
9	.003000	.001266	.000922	•052000	.035602	.025938
10	.005000	.002141	•002080.	.113000	.107649	.104573
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•006000	.011459	•003146	•064000	.122231	•024411
2 '	•005000	•009549	•001939	•047000	•089763	.019330
3	•003000	•005730	•001670	· •043000	.082124	•019391
4	•002000	•003820	•000876	•056000	.106952	•026395
5				•025000	• 047746	.017786
6	•001000	•001910	•001245	.025000	•047746	•017392
7				.031000	•059205	.022752
8	•001000	.001910	•000568	•046000	•087853	•035337
9				•006000 •012000	.011459 .022918	.016007 .029475
10 11	•002000	.003820	•003477	.017000	.032468	•047993
12	•002000	4003020	***************************************	•027000	.051566	•087530
				*		
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRANéFACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN'. FACT.	TRAN. FACT.	TRAN. FACT.
•020000	.006766		•020000	•011705	•006766	0.00528
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•399000	.294653	•190485	011464	.880074	.291000	.290000
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.	***	REFL. NT.		
7006 • 805236		3,69357		402262		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 29-8 .50000000 1.00000000 .00001010 28

				•							• .	
	SCATTER	ED FLUX	PER	NEUTRON	AT RE	GION	3D\$ •	IN	ENERGY GR	PS.	1 70 100	· · ·
` II	NCHES	1		2			3·		4		!	3
\	,	•1640°	9529	•0246	1731	• (8314	724	•03330	544	078	386149
4		•3516	5158	•0468	32018	• 2	24459	442	•05320	854	• 100	798744
6	•	•1724	4465	•0350	7256	• 1	2251	793	•03886	940	• 049	25245
8		•1012	45 18	•0139	91477	• (5609	067	•01439	714	•02	160472
12	•	•0241	3066	•003	75825	• (0997	824	.00196		• 002	297588
16		.0035	3409	. •0003	37537		0123		•00024	446	• 000	115624
18		•0011	9296	0000	9520	• (0040	834	•00005	389	•000	004451
20		•0004	4997	•0000)4453		0011		•00002			001769
24		•0000	2910	•0000	0470	• 0	0000	853	•00000	037	•000	000077
1.1	NCHES	6		7			8		9	,	10	,
• • •		.0466	9089	-	0148	• (4856	891	•15 4 22	966		75448
4		.0527			6831	-	5308		13225			24167
6		0242			3967	-	2388		.04855	-		01560
8	•	0108			2464		0909		01659			08489
12		.0012			2482		0062	_	• 00151			83121
16		.0000			4454		0011		00010			00897
18		.0000			2712		0001		.00003			001118
20		.0000			1390		0000		.00000	- 1		000174
24		.0000			0028	_	0000		.00000			
-		• • • • •							****	,		
		ED FLUX	IRAN		AL• IL	I EGY		5. V		E55		
	NCHES	1		2		_	3		4			-
4		.0945			31157		0492		.03043			237806
6		.0636			4270		5658		.02300			25883
8		•0476		,	0981		3232		•01047			356165
12	•	•0138		-	4283		0687		.00146			210782
16		.0022			20160		0086		•00020			12958
18		•0007			6148		0027		•00004			002875
20		•0002		•0000			0008		•00001			01318
24		•0000	2910	•0000	00470	• 5	00000	000	•00000	057	• 000	200077
11	ICHES	6		7		,	8		9 -		10)
4		•0389	7912	•0340	0473	• 5	2776	441	•07770	279	104	73812
6		•0139	2526	•0233	0441	• 0	1490	309	.03271	762	. 049	29716
8 .		•0075	5466	•009	1828	• 0	0619	893	.01269	095	• 008	368207
12		•0009	6154	.000	9639	• 0	0042	292	•00110	714	• 000	76332
16		•0000	8071	•0000	4340	•0	0009	080	•00007	507	• 000	000897
18		•0000	2630	•0000	2294	• 0	00000	958	•00002	873	• 000	001118
20		•0000	1084	•0000	0919	• 0	0000	457	•00000	714	• 000	000174
24		•0000	0086	•0000	0028	• 0	0000	026	•00000	050		
	•							•	•		*	
		TOTAL N	0.	TOTAL F	LUX	TOTA	L DO	SE	UNC.NO.F	LUX	TTL .FI	X/NT.
11	NCHES	TRANS./		TRANS.	'NT.	TRAN	15./N	T.	TRANS./N	IT e	REGIO	N BDS.
	· -·· = =	1.0000		1.0000			0000		1.00000			504382
4	•	3889		.6192		_	6961		03499			71030
. 6		2039		.3317			6956		•00599			22795
8		•0964		.156			4219		•00100	1.1		55401
12		.0188			6161		2264					798134
16		.0024		•0039		• 0	0270	475	ŀ.	, ,	-	90209
18		.0008	3200	.001	26899	•0	0087	523	•	•	.00	191886
20 `		. 0002	-		4689	• (0030	420				68854
24		0000	3100	•0000	4536	• 0	0002	992			. 000	04536
											٠,٠	

•	the same of the sa	•	•			
	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 20.0917665	;
	INC. ENERGY .5000000	COS. THETA	CUTOFF EGY •0000101	INC.FLX/NT 1.0000000	INC.DSE/NT	
SLAB CONF	GURATION NE	ADÁ ŤEST SIT	TE SOIL (100	. SATURATED)	
	REG	ION THICKNESS	ES (CENTIMETE	RS)		
10:1600	5.0800	5.0800	10.1600	10.1600	5.0800	
5.0800	10.1600		1041000	1011000	,	
	NUM	BER OF SCATTE	RED NEUTRONS	VŞ. ENERGY		.•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR.	FACTOR	FACTOR	FACTOR
1 .	•0000198	•0000312	•0000084	.0778789	•1640953	.0444425
2	•0000034	•0000047	•0000012	.0121875	•0246173	•0063595
3	•0000054	•0000097	•0000023	•0558750	•0831472	•0204404
4	.0000002	•0000004	•0000001	•0241875	.0333054	•0081876 .
5	•0000005	•0000068	•0000002	•0363125	•0788615	•0233298
6	•0000007	•0000009	•0000003	•0271875	• 0466909	•0177036
7	•0000002	•0000003	•0000002	•0391250	•0745015	•0372507
8	•0000002	•0000003	•0000002	•0270625	0485689	•0283319
9	•0000005	•0000005	•0000004	•076,1250	•1542297	•1156723
10				•1150000	•2087545	•1913583
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•0000059	•0000224	•0000070	•0372500	•1422842	•0790797
2	0000034	•0000131	•0000041	. •0546914	•2089053	•1193619
3	.0000034	•0000109	•0000034	•0465000	1480138	•1048071
4	•0000022	•0000070	•0000021	•0425000	•1352814	•0990601
5	•0000039	•0000124	•0000041	•0417500	•1328941	•0794437
6	•0000032	•0000101	•0000037	•0426250	•1356793	•0845863
7	•0000019	•0000062	•0000024	•0343750	·1094188	•0735829
8	•0000022	•0000042	•0000018	•0462500	•0883308	•0735042
9	.0000012	•0000023	•0000011,	•0386250	•0737682	•0718127
10	.0000012	•0000023	•0000013	•0341875	•0652932	•0720441
11	•0000007	•0000014	•0000010	•0270625	•0516855	•0757938
12	•0000017	•0000008	•0000013	•0451250	• 0215455	•0711102
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•0000310	•0000134		•0000310	•0000485	•0000134	•0000005
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•4909414	•9167722	•4930765	•1739547	•8260334	•0013833	•5076443
		MEAN ENERGY		MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		
24.02202618		•0088000		•1771644		

SCAT	TERED FLUX PER	NEUTRON AT RE	GION BDS. IN	ENERGY GRPS.	
INCHÉS	1	2	3	4	5
	.10877475	.02367802	.15435107	.03840551	.09800313
4	.22037421	.03900663	.18301775	.04547493	.05823599
6	•14877448	•02932979	•12414834	.01587892	.04843442
8	•08366933	•01359145	•03914684	•00766831	.01137747
12	.01691142	.00277913	.00632418	.00114567	.00107921
16	•00244643	• 00036727	.00054261	•00015575	.00018399
18	•00089197	•00007651	•00028174	•00004918	•00004027
20	.00033128	•00003238	•00008671	•00001915	.00002083
24	•00002076	•00000423	.00000864	•00000109	•00000172
		_			· -
INCHES	6 .	7	8	9	.10
•	•03594882	•09035944	•06364618	•19517793	• 39,560342
4	•05976103	•03787612	•049 40809	•10250102	•07405291
6	•017 834 52 •00 727 092	•01513041 •00573493	•02037725	•02347781	•01834744
8 12	•00087073		.00562256 .00054563	•00829245	.00297118
- -		•00075376		•00110183	
16	•00007454	•00009663	.00005170	•00024903	,
18	•00001876	•00006212	.00002717	.00006924	
20	•00001957	•00001376	.00000561	•00000958	
24		•00000091	•00000047	•00000054	
	•				•
SCAT	TERED FLUX TRAÑ	IS. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	2 .	3	4	5
4	•07442496	•02317654	•084 86140	•02251249	•02870194
6	•06048479	•01732058	.07338235	•00717864	•03719962
8 [']	•045 453 85	•00782727	•02320303	•00569 593	.00806290
12	•01037387	•00185137	•00428924	.00084510	•00079205
16	•00159841	•00019510	•00038751	•00010299	.00016408
18	•00059483	•00005111	•00017549	•.00003309	.00002386
20	•0.0019877	•00002567	.00005599	•0000.0803	•00001703
24	•00002076	•00000423	•00000864	•00000109	•00000172
INCHES	6	7	. 8	9	10
4	•04101412	7 •03336490	•03430306	•08274163	10
6	•01292892	•00912798	•01399301	•01498721	•05632736 •01674991
8	•00491712	•00423239	•00426668	•00755373	•00297118
12	00053919	00051072	·· •00044850	•00098856	***************************************
16	.00006247	•00005951	•00003191	.00015305	
18	.00000448	.00004195	.00001310	00006530	
20	•00001231	•00001180	.00000414	•00000866	
24	***************************************	•00000091	•00000047	•00000054	
24		40000,0072	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	*
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS
•	1.00000000	1.41420712	3.39409710	1.41420712	2.54696477
4	•30899999	•49274206	•57839529	•01131367	.88102233
6	•15800000	•26335302	•23052000	•	.46173338
8	•07206242	•11418408	•09324171		.18534545
12	.01268749	•02063860	•01494638		•03151155
16	•00178118	•00275503	•00200785		00416796
1.8	•00062888	•00100320	•00073646		.00151695
20	•00021799	•00034241 •0003835	•00024039		•00053888
24	•00002392	•00003835	•00002561		.00003835

	RUN NUMBER 37-8	HISTORIES (ENERGY SET 2E	ANGLE SET	SLANT MFP 28.4139183	
•	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	
	•5000000	•7071100	.0000101	1.4142071	3.3940971	
SLAB CONFI	GURATION NE	VADA TEST SIT	E 801L (100%	SATURATED)		•
	REG	ION THICKNESS	ES (CENTIMETE			•
10.1600 5.0800	5.0800 10.1600	5.0800	10.1600	10.1600	5.0800	
. ,	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		,
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.0000129	.0000146	•0000039	•0661953	•0769157	•0208314
2 .	•0000032	•0000030	•0000007	•0141875	•0167430	•0043252
3	•0000044	•0000069	•0000017	.0863125	•1091432 ·	•0268310
4	•0000007	•0000008	•0000002	, • 0210 6 25	.0271569	•0066761.
5	•0000012	•0000012	•0000004	•0501875	•0692990	•0205009
6		•		•0160000	0254198	•0096383
7	•0000007	•0000006	•0000003	•0401250	•0638941	.0319471
8	•0000002	•0000003	•0000002	•0300000	•0450049	•0262529
9	•0000005	•0000004	•0000003	.0850625	•1380123	•1035092
10				•1790000	•2797351	•2564239
	NUM	BER OF SCATTE	RED NEUTRONS	VS . ANGLE	,	
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	•0000039	•0000149	.0000031	•0351250	•1341673	•0496869
2	•0000022	0000084	•0000016	.0421250	.1609053	•0656560
3	.0000032	.0000101	.0000027	.0543789	•1730930	•0674370
4	.0000022	•0000070	.0000015	.0401250	.1277215	•0592697
5	.0000024	.0000078	•0000021	•0532500	•1694996	.0868371
6	•0000015	•0000047	.0000012	•0491914	•1565807	•0759879
7	•0000017	•0000054	•0000017	•0401875	•1279205	•0759652
8	•0000019	•0000037	•0000011	•0623750	1191272	•0762959
9	•0000015	•0000028	•0000013,	•0561875	•1073100	.0844890
10	•0000007	•0000014	•0000006	•0430625	.0822431	.0795430
11	•0000012	•0000023	•0000011	. 0420625	.0803333	•0825432
12	•0000015	•0000007	•0000008	•0700625	.0334523	• 0920834
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
.0000239	•0000079		•0000239	•0000278	•0000079	•0000007
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•5881328	.8513238	•5069360	.2342584	.7657294	.0003362	•4115071
		MEAN ENERGY		MEAN ENERGY		
		SCAT .TR.NT.		REFL. NT.	et	•
24.02202618		•0152054		.1991543		. •

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 1.000000000 1.000000000 .00001010 2D

	SCATTERED !	FLUX	PER I	NEUTRON	AT	REGÌ	ON	BDS.	ΊΝ	ENERGY	GRPS.		
	INCHES	1		2				3		4			5
		07255	221	.134	7100	8	•0	81786	580	•032	98945	•03	975691
4	• :	20352	002	•207	2519	8	• 0	79041	180	•050	40918	• 06	297977
. 6	•	18613		.148		_		3826			76700		656184
8		13764		•087				19043		• • • -	51964	-	614812
12		03794	-	.015	_		_	04292	-		77628		472156
16		00634		•003				00866		-	46207		075132
18		00359		001				0044			26978		046994
20 24		001 51 00015		•000				00178			11449 02053		021583 004638
27	• `	00013	700	•0000	,,,,	, 1	• ()	0002.	,,,	•000	0.2000	• 00	004030
	INCHES	6		7				8		9		10	o ·
		03991	563	.058	7171	11	•0	28608	337	•141	88859		544621
4	. •	06680	127	.094	5233	32	• 0	27834	484	• • • •	97086	• 15	006793
6		02904		. •0450				3777			81009		765068
8		01112		•016				09634			39820		176629
12		00242		•0026				01980			82616		252167
16	~	00032		•0009		_		00463		• • • •	65294		033026
18		00011		•000:				00332		-	42811		014946
20		0000 6 00001		•000	_			00006		-	13161 02246		006 735 001886
24		00301	400	•0000	1102	· • ·	• 0	00000	990	•000	02240	• 00	001000
	SCATTERED I	FLUX	TRANS	S. PER I	VT.	IN E	ĢΥ.	GRPS	5. 1	VS. THIC	KNESS		
	INCHES	1		2				3		4		!	5
4		051 51	261	.081	050	8	•0	35279	966	•025	05053	.028	865732
6		06013	402	•068				20190		•018	31492	•014	443388
8		06045		• 0469				11890			00232		789709
12		02098		•0076		-	-	02606		• • •	77615		322689
16		00325		•0016				00552			40670		058925
18		00211		•0008				00247			16679		037478
20 24		000 86 00015		•0004 •000				00124 00023			05926 02053		014152 004638
24	• \	00015	700	•0000	,,,,,	, 1	•0	0002	,,,	•500	02093	•000	
	INCHES	6		7				8		9		10	5
4	• – .	03169	101	•037	730.7	70	•0	19515	31	-	72843		700247
6		01806		•0259				25908		The second secon	41738		597409
8	. •0	00838	688	•0103	3735	9	• 0	06890	33	•019	64074	.018	81698
12	• • •	00116	158	.0019	193	6	•0	01286	57C	•003	63221	• 002	2334 37
16		00025		•000				00349		-	58648		032709
18		00003		•000				00245			35359	-	013976
20	-	00003		•000	_		_	00037			09355		006735
2.4	. • (00001	485	•0000	162	4	•0	00008	336	•000	02246	• 000	001886
				'									
	TOTA	AL NO		TOTAL F	LUX	(T	OTA	L DOS	5E	UNC.NO	FLUX	TTLAFI	LX/NT.
		NS./N		TRANS.				S./N1		TRANS			N BDS
		00000		1.0000				99999		1.000			315584
4		36199		•5646		-		51483		-	00000		350098
6	• 4	22699	999	.3545	680	1.	• 5	915.27	724		00000		55235
8	• :	12662	486	• 20 03	343	8	• 2	61091	198	•001	00001	• 36	110810
12		02799		•0466		_		51542		,			930284
16		00570		•0086				09484					448742
18	•	00274		•0046				04989					747899
20		00124		•0019				0193				1	326673
24	· •(00022	069	•0003	799		. •0	00416	24			• 000	37996

	RUN NUMBER 24-8	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 20.7168330	
	INC. ENERGY 1.0000000	COS. THETA 1.0000000	CUTOFF EGY •0000101	INC.FLX/NT 1.0000000	INC.DSE/NT 3.8000000	•
SLAB CONFI	GURATION NEV	ADA TEST SITE	801L 1100%	SATURATED)		•
•	REG	ION THICKNESS	ES (CENTIMETE	RS)		•
10.1600 5.0800	5.0800 10.1600	5.0800	10.1600	10.1600	5.0800	
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	``	•
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR*	TRAN-FACTOR	FACTOR.	FACTOR	' FACTOR	FACTOR
1 .	•0000938	•0001608	•0000271	•0392520	•0725522	•0122193
2	.0000313	•0000544	•0000084	•0851406	.1347101	.0209155
3	•0000176	•0000233	•0000043	•0295000	•0817868 °	•0152812
4	.0000098	•0000220	•0000053	, •0122500	·•0329894	•0079001
5	•0000156	•0000380	•0000120	•0172500	•0397569	.0125548
6	.0000098	•0000144	•0000053	•0203750	•0399156	•0147057
7	•0000117	•0000161	•0000076	•0310000	•0587171	•0278133
8	.0000039	•0000083	•0000048	•0181250	•0286084	•0165628
9	•0000137	•0000222	•0000164	•0595000	.1418886	•1045495
10	•0000137	•0000182	•0000163	•2841250	•4554462	•4075045
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
- ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	•0000371	•0001417	•0000404	•0472500	•1804813	•1208623
2	0000254	•0000970	•0000398	•0501250	.1914630	•1270181
3	.0000176	•0000559	•0000194	•0522500	•1663165	•1223606
4	.0000176	•0000559	•0000250	•0567520	•1806467	•1269168
5	.0000195	•0000622	•0000146	•0587500	•1870066	•1267558
6	.0000156	•0000497	•0000167	•0467500	•148.8.095	•1319922
7	•0000059	•0000186	•0000073	•0487500	•1551757	•1334099
8	•0000215	•0000416	•0000205	•0668750	.1277215	•1255201
9	.0000195	•0000373	•0000154	•0593906	•1134275	•1348616.
10	.0000117	•0000224	•0000096	•0368750	•0704259	•1031775
. 11	•0000156	•0000298	•0000357	•0231250	•0441654	•0689779
12	•0000137	•0000065	•0000085	•0496250	•0236941	•0702454
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAÑ. FACT.
•0002207	•0001076		•0002207	•0003776	•0001076	•0000307
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•5965176	1.0863714	•6400068	•2970843	•7028741	•0003164	•4029453
		MEAN ENERGY		MEAN ENERGY		•
		SCAT.TR.NT.		REFL. NT.		
38.03402618		•1392864		•4980310		

RUN NUMBER INC.ENERGY COS. THETA CUTOFF EGY. ENERGY SET 36-S 1.00000000 .34202000 .00001010 2D SLAB CONFIGURATION NEVADA TEST SITE SOIL (100% SATURATED)

SLAB C	UNFIGURATION A	EVADA (ES) SIT	501L (100%	SAI URAI EU I	
	ATTERED FLUX PE	D NEUTDON AT DO	CIÓN DOC IN	ENERGY CORE	y and a sound
		K NEUIKON AI KE 2	3 3 3 1N	ENERGY GRPS.	· 5
INCHES	1 •0727555	-	•04182621	•04294592	.08761202
4	•1868697		•04346886	03890092	.03678208
			•02946919	•01795951	.01888879
6	•0957728		•00981087	+00666056	.00678543
8 12	.0575778 .0185017		•00268317	•00214941	•00110109
	•0034076		•00043209	•00224947	.00018181
16	•0017017	· · · · ·	•00043209	•00022097	•00002516
18	•0006369		•00014818	•00002828	.00002518
2.0 24	•0000424		•00004144	•00002319	•00000390
24	*0000424	3 •00002072	*****	•00000210	*00000,370
INCHES	6	7 .	8	9	10
INCHES	.0326551		• 08723819	•26377953	.81776701
4	•0276105		.02619378	•07868321	.05160614
6	•0136287		•02788816	•02807380	.00830517
8	•0057858		•00307227	•01284515	.00170519
12	•0007636		•00070534	•00132838	•00007821
16	•0001545		•00004071	•00022817	.00001589
1.8	•0001543		•0000464	.00010873	•00000795
20	•0000176		•00000454	•00004397	•00000780
24	•0000049		•00000245	•00000935	•00000289
64	*******	2 100000114	1000002 13	***************************************	*******
		· ·			
sc	ATTERED FLUX TR	ANS. PER NT. IN	EGY. GRPS. 1	VS. THICKNESS	
INCHES		2	3	4	5
4	•0686817	-	.02280842	•01951231	•02475209
6	.0399706	•	.01761947	•01023352	.01090578
8	•0253850		•00730805	•00445118	00553438
12 .	•0093964		•00172605	•00177646	•00075609
16	•0022114		•00028644	•00018915	•00014035
18	.0010765		•000117.06	•00002064	•00001104
20	•0003670		.00002848	.00001826	.00000854
24	.0000424		•00000494	•00000270	.00000390
•					
INCHES	6 -	7	8	9	10
4	•0111067	0 •04507130	•01874155	•05937977	•03888782
6	.0078578	8 •00937861	•02410464	•02258839	•00817938
8	•0034644	3 .00621830	•00198320	•01085001	•00170519
12	.0006293	5 •00083261	•00051540	•00114457	•00006358
16	•0001216	9 •00013816	•00004071	•00021508	•00001589
18	•0000366	7 •00002952		•00009246	•00000795
20	•0000137	4 •00001085	•00000673	•00003899	• 00.000609
24	•0000049	2 •000C0114	•00000245	•00000935	•00000289
			0		
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES			TRANS./NT.	TRANS./NT.	REGION HOS.
	1.0000000	-	11.11046136	2.92380562	4.50182900
4,	.2169999		•57654173		•67179671
6	•1160000		•25074870		.33517952
8	.0597499		•10506146		15507502
.12	.0142499		•02062382		•03952582
16	•0026249		•00372782		•00646030
18	•0011015		•00144189		•00280622
20	.0004257		•00055321		•00103471
24	•0000693	3 •00010164	•00010340		•00010164

	RUN NUMBER	HISTORIES	ENERGY SET	ANGLE SET	SLANT MFP 60.5719932	
	INC. ENERGY	COS. THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	•
	1.0000000	•3420200	•0000101	2.9238056	11.1104613	
SLAB CONFI	GURATION NE	VADE TEST SITE	E SOIL (100% 5	BATURATED)	:	
•	REG	ION THICKNESS			*	•
10.1600 5.0800	5.0800 10.1600	5.0800	10.1600	10•1600	5 • 0800	•
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY GROUPS	NO. TRAN.	NO. FLUX	DOSE TRAN. FACTOR	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL.
1	.0000283	•0000144	•0000025	•0462656	•0248838	•0041910
2	•0000195	•0000088	•0000014	•0737500	• 0524824	•0081486
3 4	•0000039	•0000017 •0000011	•0000003 •0000002	•0234375 •0201875	•0143054 •0146884	•0026729 •0035175
5	.0000019 .0000019	•0000011	•0000004	•0372500	•0299651	•0094627
6	•0000029	•0000013	•0000005	•0190625	•0111687	.0041148
7	•0000010	•0000004	•0000002	•0451250	.0332472	•0157487
8	.0000019	.0000008	.0000005	.0390625	.0298372	.0172742
9.	.0000059	•0000041	.0000031	•0851250	•0902179	•0664763
10	•0000019	•0000010	•00,00009	•3170000	•2796927	•2502513
	NUM	BER OF SCATTE	RED NEUTRONS	VS . ANGLE		
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STÉR
1 .	.0000186	•0000354	•0000035	•0791328	•1511322	•0324405
2	•0000108	•0000205	•0000019	•0977500	•1866883	•0436908
3	.0000068	•0000131	•0000015	•0755078	•1442090	•0319674
4	•0000156	•0000298	•0000029	•0705000	•1346448	•0310339
. 5	•0000068	•0000131	•0000030 •0000015	•0691250 •0533125	•1320187 •1018192	•0630723 •0462441
6 7	•0000039 •0000029	•0000075 •0000056	•0000015	•0451875	•0863016	•0317181
8	•0000029	•0000037	•0000004	•0732500	•1398969	•0582195
9	.0000019	•0000037	•0000004	•0350625	•0669643	•1004341
10	•6000010	•0000017	••••••	.0231875	.0442848	•0698636
11				.0321875	.0614735	.0766645
12	.0000010	•0000019	•0000028	•0520625	•0994318	•1439442
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FAÇT.	TRAN. FACT.
.0000693	.0000100		•0000693	•0000349	•0000100	•0000078
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•7062656	•5804887	•3818579	• 3688639	•6311154	•0003135	•2933516
•		MEAN ENERGY	4	MEAN ENERGY		
		SCAT.TR.NT.		REFL. NT.		,
38.03405236		•1128083		•5222737		
			. *			

RUN NUMBER INC. ENERGY COS. THETA CUTOFF EGY. ENERGY SET 2.000000000 1.000000000 .00001010

	SCATTERED	FLUX F	PER N	EUTRON	AT	REG	ION	BDS.	Į'N	ENERGY	GRPS.	
	I NCHES.	1		2				3			4	5
	. •	096229	909.	•0767	530	9	• 0	4099	129	•04	018430	.02498371
4	•	279944	121	•2344	093	6	• 1	1976	989	•07	510426	.10810831
6		239867	736	•2286	477	2	• 1	6421	709	•10	043202	•04586112
8	•	246693	333	•1931	.788	8	• 0	8040	650	•07	108675	.04447662
12		079925		. 0597				38 59		•01	924042	
16		042675	_	•0195				1214			266102	
18		019536		•0171		-		0832			352380	
20		012917		•0086				0291			238184	
24	•	002126	595	•0009	914	2	• 0	0050	320	•00	048146	.00024666
	INCHES	6		7				8			9	10
•	•	020286	581	•0676	082	2	• 0	4129	490	•12	673832	• 22693379
4		050672	202	•1216	482	3	• 1	2117	987	•18	236765	.26018844
6	•	046334	19	.1177	724	1	• 1	1199	523	•11	389233	.20580961
8	•	041443	344	•0970	716	6	•0	4545	660	•08	814373	•11295210
12	•	005550	880	•0204	024	9	•0	2900	678	•03	127708	•04811595
16		003571	_	•0081	952	5	•0	0381	192	•01	745759	•01251920
18		001977		•0055	845	6		0189		•00	588323	•00734601
20		000742		•0024				0172		•00	276763	.00374669
24	•	000217	748	•0002	950	8	• 0	0026	824	•00	086579	.00065706
	SCATTERED	FLUX T	TRANS	. PER-N	IT.	IN	EGY.	GRP	5. 1	S. THI	CKNESS	
	INCHES	1		2				3			4	. 5
4	•	047920	37	•0594	116	8	•0	2803	261	•02	890566	• 04681339
6	·	067023		•0520				6730		•04	522695	• 02358055
8		071309		•0736		_		3064			499935	•01665122
12		028895		•0222	996	9		2295		•00	781:066	• 00468454
16		014417		•0100		-		0751			729488	• 00568745
18		007539		•0095				0435	-	-	199315	•00207726
20		007006		•0049				0169			097882	•00041510
24	. •	002126	595	•0009	914	2	•0	0050	320	•00	048146	•00024666
	INCHES	6		. 7				8			9	10
4		028690	93	.0553	215	4	• 0	4594	651	•10	321652	• 17358334
6	•	018149	01	•0553	257	6	•0	4141	684	•069	923280	.12038997
8		026171	108	•0423	067	2	•0	2835	057	• 059	991931	08506935
12	•	002647	70.7	.0108	674	6	•0	1172	927	•01	770093	•03975671
16	•	001052	212	•0063	901	4	•0	0211	706	•009	948317	.00812936
13	. •	000536	551	.0032	718	1	•0	0088	986	●.00	297372	.00525410
20	•	000362	294	•0016	012	4	•0	0106	628	•00	173064	•00324521
24	•	000217	748	•0002	950	8	•0	0026	824	•000	086579	•00065706
	•											,
	тот	AL NO.	, 1	TOTAL F	LUX		TOTA	L DO	SE	UNC.NO	D _e FLUX	TTL.FLX/NT.
	INCHES TRA	NS./NT	•	TRANS./	NT.		TRAN	S./N	T'•	TRANS	/NT o	REGION BDS.
	1.	000000	000	1.0000	000	O		9230		1.000	00000	1.71604255
4		602999		.8598				6610		• 24	200001	1.79539225
. 6		460999		•6786				4948		•119	900000	1.49382908
8		323999		•5271				0514			300001	1.07890962
12	-	126000		•1833		-		4333			400000	• 35619133
16		045249		•0751				5221			300000	• 14368737
18		025749		.0394				7166		•00	100001	.07587236
20		013937	_	•0230				3999	_			• 03953290
24	, •	004218	775	•0066	255	•	• 0	1183	Z41			• 00665337

•	RUN NUMBER	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MEP 8.5139298	
	INC. ENERGY 2.0000000	COS. THETA	CUTOFF EGY -0000101	INC.FLX/NT 1.0000000	INC.DSE/NT	
SLAB CONFI	GURATION. NE	VADA TEST SI	TE SOIL (100	% SATURATED)	•	
•	REG	ION THICKNESS	ES (CENTIMETE	(RS)	•	•
10.1600 5.0800	5.0800 10.1600	5.0800	10.1600	10.1600	5.0800	
	. NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY	•	.,
ENERGY GROUPS	NO. TRAN. FACTOR	NO. FLUX	DOSE TRAN.	NO. REFL. FACTOR	NO.FLX.REFL FACTOR	DOSE REFL.
1	.0012500	•0022722	•0003546	•0485625	.0962291	•0150211
2	.0006563	•0010293	•0001481	•040000	.0767531	.0110450
3	•0003594	•0005401	•0001067	•0230000	•0409913 ·	•0080983
4	.0002969	•0004889	•0001550	•0210000	.0401843	•0127413
5	.0001719	•0002859	•0001255	•0180000 •0110000	•02498 3 7 •0202868	•0109685 •0108856
6 7	.0001094 .0001875	•0002210 •0003398	•0001186 •0002321	•0342500	•0676082	•0461715
8	•0002031	•0003398	•0002321	•0220000	•0412949	•0342446
9	.0005469	•0009303	•0008849	•0630000	.1267383	.1205560
.10	•0004375	•0006735	•0006735	•1390000	.2269338	•2269338
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
· ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1	.0006406	•0024470	•0010972	•0390000	•1489687	•1071818
2	0003438	•0013130	•0006487	•0430000	•1642475	•1192876
3	.0005313	•0016910	•0007020	•0442500	•1408518	.1029424
4	.0003125	• 00 09947	•0005354	•0322500	•1026547	•0774795
5	•0004063	•0012931	•0007816	•0410625	•1307057	•1037939 •1116683
6	•0004063	•0012931	•0008471 •0003507	•0390000 •0300000	•1241406 •0954927	•0861681
7 8	.0001406	•0004476 •0008953	•0005775	•0352500	.0673224	•0802239
9	.0002813	•0005371	•0004293	•0290000	•0553858	•067.8487
10	.0002188	•0004178	•0003753	•0290000	•0553858	.0854583
11	.0002188	•0004178	•0004693	.0230000	.0439266	.0744481
12	.0002500	•0001194	•0002785	•0350000	•0167112	•0595286
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•0042187	•0030204		•0042187	•0070480	•0030204	•0009795
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•4198125	•7620035	•4966655	•1830878	•8159258	•0000625	•5759063
		MEAN ENERGY		MEAN ENERGY		
		SCAT. TR.NT.		REFL. NT.		
41.04102618		•4643678		.8722362		

				EUCDON CD06	
=		NEUTRON AT REG			-
INCHES	1	2	3	4	. 5
	.07592318	•08651319	•06731030	•09100320	•06904233
4 .	•23148384	•21039564	•08484520 •07093723	•09910209 •05918514	•06771047 •03838912
6 3	•16307107 •12227214	•13554 5 24 •07612675	•03648126	•03285229	•01649653
12	.04064327	•02738182	•01173132	•00865100	•00617737
16	.01135173	•00857359	•00326368	.00238685	•00138612
18	.00698645	•00393450	•00162182	•00125529	.00072319
20	•00339059	•00202620	•00095898	•00062323	•00043502
24	•00045665	•00029519	•00011626	•00008054	•00008480
INCHES	6	7	8 .	9	10
	.03456718	•11314309	•10489466	•17242952	•62839399
4	•03396898	•07542197	•06367150	15054955	•21237609
6	.02402785	•03636287	•05660332	•06150472	•07462194
8	.01207203	.02848887	•02198662	•02693390	•03818133
12	•00394709	•00860039	•00481316	•00713717	•00886826
16	•00079737	•00218555	•00144563	•00186587	•00258300
18	•00047669	•00072952	•00072946	•00090468	•00140644
20	•00010609	•00047246	•00036460	•00065962	•00066812
24	•00001592	•00010844	•00007228	•00010348	•00017977
SCATTE	RED FLUX TRAN	S. PER NT. IN	EGY. GRPS. V	S. THICKNESS	
INCHES	1	. 2	3 ·	4	5
4	.06380927	•06487029	•04602921	•03136549	•03016133
6	•06333944	•05426022	•03037071	•03099533	• 0,2335316
8 .	.04295139	•03544108	•01963022	•01696144	•00972165
12 '	.01573301	•01373363	•00673844	•00474461	•00335644
16	.00555098	•00416973	•00169929	•00139973	•00095772
18	.00318195	•00207306	•00087870	•00066002	•00046046
20	.00170936	•00099482	•00045840	•00034935	•00024287
24	•00045665	•00029519	•00011626	•00008054	•00008480
INCHES	6	7	8	9	10
4	.02250788	•04410207	•03297106	•09338152	•17600470
6	•01045518	•02069834	•04304907	•04076638	.06342161
8	.00627901	.01888427	.01561113	•01795269	•03324922
12	.00184405	•00568732	•00290751	•00453651	.00751950
16	.00046021	•00153899	•00093302	•00119064	.00230833
18	.00032323	.00045519	.00054351	.00056486	
20	.00007880	•00027495	•00023665	.00042197	.00061556
24	•00001592	•00010844	•00007228	•00010348	•00017977
	TOTAL NO.	TOTAL FLUX	TOTAL DOSE	UNC.NO.FLUX	TTL.FLX/NT.
INCHES	TRANS./NT.	TRANS./NT.	TRANS./NT.	TRANS./NT.	REGION BDS.
INCHES	1.00000000	2.92380562	12.54987337	2.92380562	4.28476717
4	•36499999	•64905991	1.78657768	•04385710	1.27338242
6	•22399999	•38363326	•84460666	•00292383	•72317232
8	13212485	•21668211	•43236539	1005 15 303	•41189171
12	•04224995	•06680305	. 11458599		•12795086
16	01290620	•02020865	•03366996		.03583939
18	•00656247	•01039699	•01692391		.01876805
20	.00341979	.00538273	•00891692		.00970490
24	•00095699	•00151332	•00255643		.00151332

						•
•	RUN NUMBER 26-8	HISTORIES 1000	ENERGY SET	ANGLE SET	SLANT MFP 24.8930766	
	INC ENERGY	COC THETA	CUTOFF EGY	INC.FLX/NT	INC.DSE/NT	
	INC. ENERGY 2.0000000	.3420200	•0000101	2.9238056	11.9876029	
SLAB CONFI	GURATION NEV	ADA TEST SITE	SOIL (100%	SATURATED)		
		ION THICKNESS			5.0800	
10.1600 5.0800	5.0800 10.1600	5.0800	10.1600	10.1600	340600	
3.0000	1011000				*	
•	NUM	BER OF SCATTE	RED NEUTRONS	VS. ENERGY		
ENERGY	NO. TRAN.	NO. FLUX	DOSE TRAN.	NO. REFL.	NO.FLX.REFL	DOSE REFL.
GROUPS	FACTOR	TRAN.FACTOR	FACTOR	FACTOR	FACTOR	FACTOR
1	.0002852	•0001639	•0000256	•0381719	•0259672	•0040534
2	•0001816	•0001102	•0000159	•0542656	•0295892	•0042579
3	.0000742	•0000419	•0000083	•0403906	•0230215	•0045481
4	•0000469	•0000262	•0000083	•0470000	•0311249	•0098689
5	.0000430	•0000278	•0000122	•0261250	•0236138	•0103671
6	.0000117	•0000058	•0000031	•0140156	•0118227	•0063439
7	.0000723	•0000384	•0000262	•0481406	•0386972	•0264274
8	.0000410	•0000299	•0000248	•0425156	•0358761	•0297509
9	.0000684	•0000349	•0000332	•0651406	•0589743	•0560975
10	.0001328	•0000660	•0000660	• 2402500	•2149233	•2149233
	NUM	BER OF SCATTE	RED NEUTRONS	VS. ANGLE		
	110 TD.11	NO *044	DOCE TOAN	NO 0551 .	NO 8551	DOCE DEEL
ANGULAR	NO. TRAN.	NO. TRAN.	DOSE TRAN.	NO. REFL.	NO. REFL.	DOSE REFL.
SECTORS	FACTOR	FACT/STER	FACT/STER	FACTOR	FACT/STER	FACT/STER
1 .	.0002402	•0004588	•0000779 ′	•0668750	•1277215	•0260698
2	•0001406	•0002686	•0000534	•0896562	•1712304	•0499014
3	.0001191	•0002276	•0000409	•0721406 •0691562	•1377781 •1320784	•0377630 •0344688
4	•0001172	•0002238	•0000375			
5	•0000684	•0001305	•0000367	•0503750 •0396562	•0962090 •0757377	•0424085 •0341583
6 ,	.0000644	•0001231	•0000271	•0378906	•0723656	•0326255
7	•0000684	•0001305	•0000305	•0725000	•1384645	•0683069
8	.0000840	•0001604 •0000261	•0000402 •0000131	•0333750	• 0637414	•1001295
9	.0000137	•0000281	•0000305	•0220000	•0420168	•0733066
10 11	.0000156 .0000098	•0000298	•0000303	•0222500	•0424943	.0619516
12	•0000156	•0000298	•0000218	•0401406	.0766628	•1386361
12	•0000130	***************************************	***************************************			
(S+U) NO.	(S+U) DOSE	UNSCAT.	SCAT. NO.	SCAT.NO.FLX	SCAT. DOSE	SCAT. EGY.
TRAN.FACT.	TRAN. FACT.	NO. FACTOR	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.	TRAN. FACT.
•0009570	.0002236		•0009570	•0005450	•0002236	•0002150
NUMBER	NO. FLUX	DOSE	ENERGY	ENERGY ABS.	NUMBER ABS.	NO. CUTOFF
REFL. FACT.	- REFL. FACT.	REFL. FACT.	REFL. FACT.	FACTOR	FACTOR	FACTOR
•6160156	•4936103	•3666385	•2967976	•7029767	•0018320	•3811953
		MEAN ENERGY		MEAN ENERGY	•	
		SCAT.TR.NT.		REFL. NT.		
41.04105236		•4493160		•9636041		
			•			

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